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COUNTY BOROUGH OF SOUTH SHIELDS.



**ANNUAL REPORT OF THE
MEDICAL OFFICER OF HEALTH
FOR THE YEAR 1936.**

W. CAMPBELL LYONS,
M.B., Ch.B., D.P.H.

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CHAIRMEN OF COMMITTEES.

Health Committee—ALDERMAN G. DRUERY, J.P.

Hospital and Sanatorium Sub-Committee—ALDERMAN G. DRUERY, J.P.

Slaughterhouses Sub-Committee—ALDERMAN D. RICHARDSON, M.B.E., J.P.

Maternity and Child Welfare Committee—MRS. COUNCILLOR M. E. SUTTON, J.P.

Education Committee—ALDERMAN R. CHAPMAN, C.M.G., D.S.O., D.L., J.P.

School Medical Service Sub-Committee—MISS F. ROBERTSON, J.P.

Housing and Town Planning Committee—COUNCILLOR R. W. BROWN.

Town Improvement Committee—COUNCILLOR J. W. MITCHELL.

Public Assistance Committee—ALDERMAN G. LINNEY, J.P.

STAFF OF PUBLIC HEALTH DEPARTMENT.

Post or Appointment.	Name.	Qualifications.
*Medical Officer of Health, Chief Tuberculosis Officer, Principal School Medical Officer, Bacteriologist, etc.	W. Campbell Lyons	M.B., Ch.B., D.P.H.
Clinical Medical Officer, Venereal Diseases	D. J. Mackinnon ..	M.B., Ch.B.
Tuberculosis Officer; and Medical Officer, Cleadon Park Sanatorium	R. A. N. McMath ..	M.B., B.Ch., B.A.O., D.P.H., Diploma in Tuberculous Diseases.
Assistant Medical Officer, Maternity and Child Welfare	Dorothy O. S. Blair..	M.B., B.S.
Assistant School Medical Officers	H. Levy Margaret C. P. Hamilton	M.B., B.S. M.B., Ch.B., D.P.H.
	(Resigned 31-8-36) Dorothy D. Nichol .. (Commenced 26-8-36)	M.B., B.S., B.Hy., D.P.H.
Ear, Nose & Throat Surgeon (School Medical Service)..	W. J. Harrison§ ..	M.B., B.S., M.R.C.S., L.R.C.P.
Consultant Ophthalmologist	T. Gowans§	M.B., Ch.B.
School Dental Surgeons	F. Innes J. L. Reid§	L.D.S. L.D.S.
Public Vaccinators	G. P. McNabb§	M.B., B.S.
	T. W. Carstairs§ ..	M.B., Ch.B.
	A. de Redder§	M.B., B.S.
	A. S. Hannay	M.B., Ch.B., D.C.O.G.
Borough Analysts	J. T. Dunn§ H. C. L. Bloxam§ ..	D.Sc., F.I.C. F.I.C.

* Also Medical Officer to North East Durham Joint Smallpox Hospital Board.

§ Part-time Officials, also in Consultant or private practice.

Staff of Public Health Department.—*Continued.*

Post or Appointment.	Name.	Qualifications.
Veterinary Surgeon	J. J. McDowall§	M.R.C.V.S.
Food Inspector, etc.	W. Hill	Certificate R.S.I. and Meat Inspector's Certificate.
Housing Inspector	R. Ayre	Certificate R.S.I.
District Sanitary & Housing Inspectors, etc.	R. W. Weir	Do.
	W. Smith	Do.
	C. Skelton	Do.
	J. McVay	Do.
	P. Graham	Do. and Meat
	(4/5/36 to 25/7/36)	Inspector's Certifi- cate.
Inspector under the Shops Acts	S. Harkness	Do. do.
	(Commenced 9/11/36)	
	T. Tinn.....	....
Vaccination Officer, etc.	A. T. Lawson .....	....
Inspector of Midwives	Miss R. Freeman ..	S.R.N. and C.M.B. Certificate.
Health Visitors, etc.	Miss A. Smyth	S.R.N. and C.M.B. Certificate.
	Miss E. J. Smith ..	Do.
	Miss M. Munro	Do.
	Miss R. Barrell	Do.
	Mrs. E. Cowley	Do.
	Miss J. B. Clark ..	Do.
	Miss C. W. Everson..	S.R.N., C.M.B. Cert. and H.V. Cert.
	Miss M. Sherry	Do.
School Nurses	Miss S. M. A. Simpson	Do.
	Miss A. L. Ridley ..	S.R.N. and C.M.B. Certificate.
Chief Clerk	Miss E. V. Schofield	S.R.N.
	J. Yeoman	Certificate R.S.I.
Clerks	C. Hymers	Do. and Meat Insp's. Cert.
	J. Hilton	Certificate R.S.I.
	W. T. Foster	Do.
	W. H. Trotter ....	....
	G. F. Kershaw ....	....
	W. Johnson .....	....
	H. S. Wilson .....	....
	J. R. Wilson .....	....
	(Commenc'd 12/10/36)	
	Miss E. Treliving....	....

Staff of Public Health Department.—*Continued.*

Post or Appointment.	Name.	Qualifications.
Clerks	Miss E. Park .....	....
	Miss E. Robertson ..	....
	Miss M. R. Tate ....	....
	Miss M. Tickner ....	....
	Miss L. D. Pude ....	....
	(Resigned 7/11/36)	
	Miss J. Bertram ....	....
	(Commenced 14/11/36)	
Dental Attendant, School Clinic	Miss O. Deakin ....	....
Matron, Deans Isolation Hospital	Miss M. M. Buchanan	S.R.N.
Matron, Cleadon Park Sana- torium	Miss L. Allison	S.R.N.
V.D. Clinic Nurse	Miss E. H. Lewth- waite	S.R.N.
V.D. Male Attendant	J. Bentley .....	....

POOR LAW MEDICAL STAFF.

Post or Appointment.	Name.	Qualifications.
Harton Hospital Medical Officer	A. S. Hannay	M.B., Ch.B., D.C.O.G.
Assistant Medical Officer	T. Scott	M.B., Ch.B.
House Surgeons	J. Angus	M.B., Ch.B.
	D. Wood	M.B., Ch.B.
Consulting Surgeon	J. Collingwood Stewart§	M.B., M.S., F.R.C.S. (Eng.)
Consulting Physician	W. H. Dickinson§ ..	O.B.E., M.D., D.T.M. & H., M.R.C.P., (Ed.), D.P.H.
District Medical Officers	H. D. Ord§	M.B., B.S.
	H. M. S. Blair§	M.B., B.S.
	J. A. O'Callaghan§ ..	M.B., B.S.
	A. V. J. Harrison§ ..	M.B., B.Ch., B.A.O.

§ Part-time, also in Consultant or private practice.

To the Chairman and Members of the Health Committee.

I have the honour to present the 62nd annual report on the health and sanitary conditions of the County Borough and the work of my department for the year 1936.

According to the Registrar-General's estimate the population showed a further decline from 112,000 in 1935 to 111,800 ; the latter figure includes the population in the area added to the borough on the 1st April, 1936. A modified estimate of 111,350 has been used in the calculation of the birth, death and other rates, since the population of the added area was not included in the population of the borough for the first quarter of the year.

The birth rate showed a further decline to 16.9 per 1,000 of the population and is the lowest birth rate on record. This is no doubt due in some measure to the fact that so many young people have migrated to more prosperous areas in recent years and to some extent to increasing knowledge of birth control.

The death rate was 13.2 per 1,000 of the population as compared with 12.6 per 1,000 in 1935. While higher than in the previous year the death rate is below the average recorded for the borough. Fifty per cent. of the deaths occurred in persons over 60 years of age. This is indicative of the greater length of life of the population and the increasing age at death. There was a slight increase in the death rate for the country generally in 1936.

The death rate for the principal epidemic diseases only amounted to 0.43 per 1,000 of the population and is the smallest death rate from these diseases yet recorded in South Shields.

The infant mortality rate increased from 80 per 1,000 births in 1935 to 87 in 1936. The rate for England and Wales was 59 and for the 122 great towns was 63. The neo-natal rate, *i.e.*, deaths of infants one month old, was 47 per 1,000 births. It is at this period where the greatest wastage of infant life occurs and it will only be reduced when every expectant mother realises the importance of care and supervision during pregnancy.

The maternal death rate showed a satisfactory decline. There were only six deaths from puerperal causes during the year, a rate of 3.1 per 1,000 total births as compared with 3.7 for England and Wales. This decline is in great measure due to pre-natal care and nourishment.

Cancer caused 181 deaths or 12.3 per cent. of the total deaths, as compared with 10.1 per cent. in 1935. The death rate from this group of diseases, the highest on record, was 1.63 per 1,000 of the population. Much of the failure to reduce the high death rate from cancer is due to the fact that very many people defer seeking advice and treatment until the disease is too advanced to permit of radical cure. One knows of cases in which this has happened, and in people who are otherwise well informed. After middle life the presence of a swelling, lump or ulcer, or a symptom which does not readily yield to treatment, should be an indication for expert advice. A special report on cancer will be found on p. 83.

Tuberculosis caused 121 deaths, equal to a death rate of 1.08 per 1,000 of the population. This is by far the lowest death rate from tuberculosis ever recorded in the borough. The disease accounted for 8.2 per cent. of the total deaths as compared with 11.4 per cent. in 1935.

I regret to have to return to the subject of notification. Many cases of tuberculosis are not notified until the patient is far advanced in the disease, when there is little hope of cure. In the early stages there may be difficulty in diagnosing the disease, but the Council have provided every known facility to assist in the diagnosis, facilities which could with advantage be used more fully and if used would give a hope of cure and bring the disease more rapidly under control. I have referred to this subject in former reports. I hope it will be unnecessary to refer to it, in possibly stronger terms again.

With regard to housing, I have reported on the effect of improved housing on vital statistics, on page 53. It might be argued that many of those transferred from slum areas have vacated their new houses. It is known, however, that more than 75 per cent. have not removed. Even if the figures given are discounted by 25 per cent. the results are still very convincing.

A perusal of the report will show the large and varied amount of work carried on by the department. Much more is unseen and

cannot be set out in figures and paragraphs. A modern health department, in which all the health services are co-ordinated, touches almost every phase in the life of the individual : before birth in pre-natal care, after birth in infant welfare, care of the toddler, the school child, the diseases peculiar to adolescence, parenthood, promotion of health, environment, food, water, air, nutrition, care of the sick, morbidity, death, and even after burial, exhumation. Here, fortunately, the responsibility ends.

To the members of the Council for their interest and help and to every member of my staff for their work and loyalty I record my grateful appreciation.

W. CAMPBELL LYONS,

MEDICAL OFFICER OF HEALTH.

TOWN HALL,

SOUTH SHIELDS.

STATISTICS AND SOCIAL CONDITIONS OF THE BOROUGH.

Area of Borough (including inland water but excluding foreshore and tidal water)	4,104 acres.
Population at Census 1931	113,455
Resident population, mid-year 1936 (Registrar-General's estimate)	111,800
Modified estimate of population (for calculation of death-rates, etc.) at mid-year, 1936	111,350
Number of inhabited houses at end of 1936 (according to Rate Books)	30,619
Rateable Value at 1st April, 1936	£534,790
Produce of a penny rate (estimate for year 1936-37)	£2,035

Social Conditions.

The principal industries are shipbuilding, ship-repairing, coal-mining and export. Except for those employed in a local biscuit factory and at a dye works, there is very little industrial employment of women in the Borough.

UNEMPLOYMENT :

I am indebted to Mr. W. Thomson, Manager of the Employment Exchange, for information relating to unemployment, which I have summarised below.

The average numbers on the live registers, taken from the monthly returns, were as follows. The figures for 1935 are also given :—

	1936.	1935.
Men (age 21-64)	9,749	11,265
Young Men (age 18-20) ..	414	551
Boys (age 16-17)	320	283
Boys (age 14-15)	311	488
Women (age 21-64)	359	379
Young Women (age 18-20) ..	159	165
Girls (age 16-17)	198	165
Girls (age 14-15)	287	394
	11,797	13,690

This total represents 35 per cent. of the insured population as at December, 1936, viz., 33,419. Of the different groups the percentage of unemployed was as follows :—

	1936.	1935.
Men (age 21-64)	42%	48%
Young Men (age 18-20)	23%	25%
Boys (age 16-17)	19%	23%
Boys (age 14-15)	23%	37%
Women (age 21-64)	14%	15%
Young Women (age 18-20) . .	14%	14%
Girls (age 16-17)	17%	18%
Girls (age 14-15)	35%	40%
	—	—
Total	35%	40%
	==	==

The maximum and minimum numbers of persons unemployed during the year were :—

	<i>Maximum.</i>	<i>Minimum.</i>
Men (age 21-64)	11,040 (Feb.)	8,552 (Nov.)
Young Men (age 18-20)	503 (Jan.)	361 (Nov.)
Boys (age 16-17)	396 (Feb.)	282 (Nov.)
Boys (age 14-15)	532 (Jan.)	169 (Dec.)
Women (age 21-64)	425 (Jan.)	292 (July)
Young Women (age 18-20)	224 (Jan.)	109 (July)
Girls (age 16-17)	252 (Feb.)	147 (July)
Girls (age 14-15)	400 (Jan. April)	163 (Dec.)

HEALTH INSURANCE :

The Clerk to the South Shields Health Insurance Committee informs me that the number of insured persons in the Borough on the 1st January, 1937, was 42,280, as compared with 41,294 a year previously, and 40,355 on 1st January, 1935.

The number of prescriptions dispensed during 1936 was 241,847, at a cost of £7,644, as compared with 220,915 during 1935, at a cost of £6,879.

POOR LAW RELIEF :

I am informed by the Public Assistance Officer that the number of persons on relief was as follows :—

OUT-RELIEF CASES.		<i>Ordinary. Unemployed.</i>	
1. Average weekly number of "cases" chargeable during the year ended 31st December, 1936		2,030	200
2. Total cost of relief for same period		£56,569	£6,281
3. Number of persons who received out-door relief during above period—			
Men ..	1,745	1,079	
Women ..	3,197	744	
Children ..	2,692	1,496	
4. Number of persons included in No. 1 above who also received out-door medical relief—			
Men	178	24	
Women ..	448	19	
Children ..	197	38	
5. Number of persons who received out-door medical relief only—			
Men	74	81	
Women ..	238	221	
Children ..	172	463	
IN-DOOR RELIEF.			
6. Number of persons chargeable to the County Borough in Harton Institution on 1st January, 1937 ..		576	

Extracts from Vital Statistics.

	<i>Total.</i>	<i>Male.</i>	<i>Female.</i>		
Live Births :—					
Legitimate ..	1,808	945	863	} Birth rate per 1,000 of the estimated resident population	16.9
Illegitimate ..	70	35	35		
Still Births	74	50	24	Rate per 1,000 total births (live and still- births)	38
Deaths	1,467	799	668	Death rate per 1,000 of the estimated resi- dent population	13.2

	<i>Deaths.</i>	<i>Rate per 1,000 total Births.</i>
Deaths from puerperal causes—		
Puerperal sepsis	5	2.56
Other puerperal causes	1	0.51
Total	6	
Death rate of infants under one year of age :		
All infants per 1,000 live births.....	87	
Legitimate infants per 1,000 legitimate live births.....	86	
Illegitimate infants per 1,000 illegitimate live births.....	114	
Deaths from Cancer (all ages).....	181	
„ Measles (all ages).....	8	
„ Whooping cough (all ages)....	3	
„ Diarrhoea (under 2 years of age)	23	

VITAL STATISTICS.

Population.

The population of the Borough at the 1931 Census was 113,455.

Under the County of Durham Review Order, 1936, 921 acres with an approximate population of 2,300 were added to the Borough.

The natural increase of the population during the year, *i.e.*, excess of births over deaths, was 411.

The population of the extended borough as estimated by the Registrar General at mid-year 1936, was 111,800.

As the births, deaths, and infectious diseases of the added area are not included in the statistics of the borough for the first three months of the year, a modified estimate of the population of 111,350 is used for the calculation of these rates throughout the borough as extended for the whole year.

Births.

During 1936 there were 1,878 births, compared with 1,930 in 1935, the birth rate being 16.9 per 1,000 of the population. In this figure are included the births of 24 children of South Shields parents who were born elsewhere, but not those of 70 children born in South Shields whose parents belong to other areas. Of the total births 980 were males and 898 were females.

There were 70 births of illegitimate infants (35 males and 35 females) or 3.7 per cent. of the total live births.

The birth rate for the Borough as compared with that of the country generally is as follows :—

England and Wales	14.8
122 County Boroughs and Great Towns	14.9
143 Smaller Towns.....	15.0
London Administrative County	13.6
South Shields	16.9

The figures in the above table show a slight increase on the rates for 1935, except South Shields where there is a decrease from 17.2 to 16.9 per 1,000 of the population.

The annual birth rates for the Borough since 1871 are shown on page 32. The number of births reported to the Health Department under the Notification of Births Act is referred to on page 113, and the number in each ward is given on page 128.

Still-Births.

The number of still-births registered during 1936 has been supplied by the Registrar-General and is published at the request of the Ministry of Health.

	<i>Still-births Regis- tered.</i>		<i>Inward Trans- fers.</i>		<i>Outward Trans- fers.</i>		<i>Still-births allocated to South Shields.</i>	
	M.	F.	M.	F.	M.	F.	M.	F.
Total : Legitimate and illegitimate..	60	27	..	..	10	3	50	24
Illegitimate	2	1	..	..	1	..	1	1

The following table compares the number of still-births in South Shields with the country generally.

	<i>Per 1,000 of the population.</i>
England and Wales	0.61
122 County Boroughs and Great Towns ..	0.67
143 Smaller Towns.....	0.64
London	0.53
South Shields	0.66

There were 38 still-births in South Shields per 1,000 total births as compared with 40 per 1,000 in England and Wales.

Deaths.

During 1936, 1,467 deaths occurred among residents of South Shields ; this is equivalent to a death rate of 13.2 per 1,000 of the population, as compared with 12.6 in 1935, 13.2 in 1934, 13.7 in 1933, and 13.4 per 1,000 in 1932. Included in the number of deaths are those of 49 residents of the Borough who died elsewhere, but 189 deaths of residents of other areas who died in South Shields are excluded.

The death-rate for South Shields as compared with that for the country generally is as follows :—

England and Wales	12.1
122 County Boroughs and Great Towns	12.3
143 Smaller Towns	11.5
London	12.5
South Shields	13.2

In order that the death rates of the various local areas in England and Wales may be more strictly comparable, the Registrar-General now supplies to each area an “areal comparability factor” based on the variations in the sex and age constitution of the populations of the respective areas. This figure as applied to South Shields is 1.12. If the death rate is multiplied by this factor it is increased to 14.8 per 1,000 of the population, which, when compared with the death rate for the country generally is found to be 22 per cent. above the average for England and Wales.

The death rate in South Shields in the first quarter of the year was 15.9 ; in the second, 13.6 ; in the third, 10.8 ; and in the fourth, 12.4 per 1,000 of the population.

Of the total deaths, 799 were among males and 668 among females.

The chief causes of death were as follows :—

	<i>No. of deaths.</i>	<i>Percentage of total.</i>
Heart diseases	307	20.9
Tuberculosis	121	8.2
Cancer	181	12.3
Pneumonia	78	5.3
Bronchitis	81	5.5
Arterio-sclerosis	70	4.8
Cerebral haemorrhage and apoplexy	91	6.2
Nephritis	46	3.1
Violence and accidents	47	3.2
Influenza	19	1.3
Prematurity and diseases of early infancy	75	5.1

80 per cent. of the deaths from heart disease occurred in persons over 60 years of age.

(See also page 83 *re* Cancer).

The age at death is summarised as follows :—

	<i>No. of deaths.</i>	<i>Percentage of total.</i>
Under 1 year	163	11.1
1—4 years	44	3.0
5—14 „	39	2.7
15—24 „	57	3.9
25—34 „	66	4.5
35—44 „	103	7.0
45—59 „	258	17.6
Over 60	737	50.2

Of the 44 deaths in the age-group 1—4 years, respiratory diseases caused 15 deaths, measles 7, whooping cough 2, diphtheria 4, and tuberculosis, 5.

Coroners' inquests were held in respect of 58 deaths. In two cases the Coroner ordered a postmortem examination, but it was found unnecessary to hold inquests. There were 61 deaths, including those of 11 children under one year, which were not certified by a medical practitioner, and on whom no inquest or Coroner's postmortem examination was held.

479 deaths, or 33 per cent. of the total, occurred in institutions, as follows :—

Harton Institution.....	324*
Ingham Infirmary	95*
Deans Hospital	12*
Cleadon Park Sanatorium	1
Private Nursing Homes.....	5
Institutions outside the Borough	42

* Exclusive of 174 deaths in Harton Institution, 8 in the Ingham Infirmary and 1 in the Deans Hospital, among non-residents of the Borough.

The 42 deaths in institutions outside the Borough occurred as follows :—

Royal Victoria Infirmary, Newcastle	6
Leazes Hospital, Newcastle	3
Fleming Memorial Hospital, Newcastle	1
Ear, Nose and Throat Hospital, Newcastle..	1
Princess Mary Maternity Hospital, Newcastle	1
Mental Hospitals.....	13
Public Assistance Hospitals	4
Nursing and Maternity Homes.....	4
Other Hospitals	9

The causes of death in institutions are set out in table 3, page 30.

In the following table, the South Shields death rates in 1936 are compared with provisional rates for the country generally, the county boroughs and the smaller towns.

	Death-rate per 1,000 population.								Deaths per 1,000 live births.	
	All Causes.	Enteric Fever.	Smallpox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria.	Influenza.	Diarrhoea and Enteritis (under 2 years).	Infant Mortality Rate.
England and Wales..	12.1	0.01	..	0.07	0.01	0.05	0.07	0.14	5.9	59
122 County Boroughs and Great Towns ..	12.3	0.01	..	0.09	0.01	0.06	0.08	0.14	8.2	63
143 Smaller Towns ..	11.5	0.00	..	0.04	0.01	0.04	0.05	0.15	3.4	55
London	12.5	0.01	..	0.14	0.01	0.06	0.05	0.14	14.4	66
South Shields	13.2	..	..	0.07	0.05	0.03	0.07	0.17	12.2	87

The tabulation of deaths as given in Table 1, page 18, follows the Detailed International List of Causes (1920 Revision), and the classification has been done in accordance with the rules contained in the Registrar-General's Manual in connection with that List.

At the request of the Ministry of Health the short list of the causes of death as supplied by the Registrar-General is included in the report (Table 1(A), page 27) in order that the relation between the local tabulation and the statistics supplied by the Registrar-General may be compared. There is substantial agreement, but as the Registrar-General points out the classification of some deaths in respect of which the certifying medical practitioners have given indefinite causes is modified in the light of further information obtained by him from them by special enquiries ; and this possible source of discrepancy should be borne in mind.

In the circular of the Ministry of Health on the contents of Annual Reports of Medical Officers of Health, certain information relating to cancer as it affects each district is requested. On page 83 will be found a special report on this disease, an advance copy of which report was sent to the Chief Medical Officer of the Ministry on 15th January, 1937.

TABLE 1.—CONTINUED.

CAUSES OF DEATH.	AGES AT DEATH.																							
	M. F.		All Ages																					
				0-1	1-2	2-3	3-4	4-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80+
186. In mining and quarrying.....	2	..	2	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..
188. By other forms of crushing (road vehicles, on railways, etc.)	9	2	11	..	..	..	..	..	..	1	1	2	..	1	2	..	..	1	2	1	..	..	..	..
190. Wounds of war	1	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
201. Fracture (cause not specified).....	1	3	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	2
XV.—ILL-DEFINED DISEASES.																								
204. Sudden death	2	..	2	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..
205. Cause of death unstated or ill- defined—																								
(1) Heart failure (age 1-70).....	9	2	11	..	..	..	..	..	..	1	..	..	..	..	..	1	1	2	1	5	..	..	..	..
Total Males	799	..	..	102	8	5	7	4	13	9	13	14	20	17	27	30	32	53	75	62	89	98	60	61
Total Females	..	668	..	61	10	6	3	1	8	9	18	12	11	18	21	25	24	29	45	57	82	77	66	85
GRAND TOTAL	799	668	1467	163	18	11	10	5	21	18	31	26	31	35	48	55	56	82	120	119	171	175	126	146

Causes of Death.	Sex.	All Ages.	0—	1—	2—	5—	15—	25—	35—	45—	55—	65—	75—
ALL CAUSES	M. F	799 668	101 62	8 10	16 10	22 17	27 30	37 28	57 47	86 53	137 100	186 159	122 152
1 Typhoid and paratyphoid fevers	M F	..	..	..	..	..	..	..	..	..	..	..	..
2 Measles	M F	3 5	..	1 ..	2 4	..	..	..	..	..	..	..	..
3 Scarlet fever	M F	4 2	1 ..	1 ..	2 1	..	..	1	..	1	..	..	..
4 Whooping cough	M F	1 2	1 1	..	..	..	..	..	..	..	..	..	..
5 Diphtheria	M F	6 2	..	..	4 ..	2 2	..	..	..	..	..	..	..
6 Influenza	M F	13 5	..	..	..	..	..	1	2	4	2	4	..
7 Encephalitis lethargica	M F	1 1	..	..	..	1 1	..	..	..	..	..	..	1
8 Cerebro-spinal fever	M F	1 ..	..	..	..	1 ..	..	..	..	..	..	..	..
9 Tuberculosis of respiratory system	M F	59 32	..	..	..	2 3	8 13	16 9	9 3	16 4	6 ..	2 ..	..
10 Other tuberculous diseases ..	M F	20 7	1 1	..	2 1	4 ..	5 1	3 1	1	2	..	2 ..	..
11 Syphilis	M F	2 ..	1 ..	2 ..	1 ..	..	..	..	..	..	1	..	..
12 General paralysis of the insane, tabes dorsalis	M F	5 2	..	..	..	..	..	..	2	..	1	2	..
13 Cancer, malignant disease ..	M F	88 95	..	..	..	..	..	1	7	13	22	30	15
14 Diabetes	M F	4 10	..	..	..	..	1	..	14	18	24	28	10
15 Cerebral haemorrhage, etc. ..	M F	35 55	..	..	..	..	..	1	..	2	3	1	..
16 Heart disease	M F	180 149	..	..	2 ..	1 1	3 5	3 1	3 9	4 6	38 28	70 51	48 48

CAUSES OF DEATH.	YEAR, 1936.				WARDS.†										Unknown.*					
	Total.	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Shields.	Beacon.	St. Hilda.	Hadrian.	Holborn.	Laygate.	Victoria.	Bents.	Rekendyke.		Westoe.	Deans.	Tyne Dock.	Simonside.	West Park.	Harton.
All Causes (Certified (Uncertified)	1406 61	430 11	359 19	294 9	323 22	43 1	64 3	61 1	95 8	38	78	98 6	85 5	92 5	107 5	105 3	123 8	133 9	134	139 7
1 Enteric fever .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
2 Smallpox .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
3 Measles	8	2	.....	4	.....	.....	1	.....	.....	.....	1	3	1	.....	.....	.....	1	1	.....	2
4 Scarlet fever	6	3	.....	2	1	.....	.....	2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	2	.....
5 Whooping cough	3	1	.....	2	.....	1	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
6 Diphtheria	8	2	3	1	2	.....	.....	2	.....	1	1	1	.....	1	1	.....	1	5	3	2
7 Influenza	19	9	6	2	2	.....	.....	.....	1	1	.....	.....	.....	1	1	.....	4	5	1	1
8 Encephalitis lethargica	2	2	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
9 Meningococcal meningitis	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
10 Tuberculosis of respiratory system	95	27	27	22	19	4	5	8	7	6	6	6	3	3	2	7	8	10	10	1
11 Other tuberculous diseases	26	6	5	7	8	1	1	2	.....	2	2	1	1	4	.....	3	1	2	4	.....
12 Cancer, malignant disease	181	48	59	37	37	5	6	6	13	2	13	12	11	14	18	13	17	12	22	.....
13 Rheumatic fever	12	4	3	4	1	.....	.....	.....	1	2	1	.....	1	2	1	1	1	2	1	.....
14 Diabetes	14	6	2	2	4	1	2	.....	1	2	.....	1	1	1	2	1	1	1	2	.....
15 Cerebral haemorrhage, etc.	91	24	19	25	23	4	2	4	1	1	3	7	7	5	10	26	7	10	10	.....
16 Heart disease	307	100	75	51	81	5	14	6	26	7	17	28	24	21	22	26	18	24	41	6
17 Arterio-sclerosis	70	20	20	15	15	1	5	3	3	1	2	8	7	4	10	6	5	2	6	.....
18 Bronchitis	81	33	18	11	19	.....	7	6	6	2	5	5	3	7	3	8	8	8	3	.....
19 Pneumonia (all forms)	78	36	18	9	15	5	7	2	3	5	4	5	3	1	6	4	10	8	2	1
20 Other respiratory diseases	15	5	1	3	6	.....	1	1	1	2	1	1	2	1	.....	1	2	1	3	.....
21 Ulcer of stomach or duodenum	16	6	2	4	4	.....	1	1	2	2	1	.....	.....	2	.....	.....	6	4	.....	.....
22 Diarrhoea, etc. (all ages)	29	2	8	7	12	1	1	3	.....	2	3	.....	.....	2	.....	.....	2	1	.....	.....
23 Appendicitis	5	2	1	1	1	.....	1	.....	.....	.....	.....	.....	.....	2	.....	.....	1	3	.....	.....
24 Cirrhosis of liver	6	.....	2	2	2	.....	1	.....	.....	.....	.....	.....	1	1	.....	.....	1	1	.....	.....
25 Acute and chronic nephritis	46	15	5	18	8	3	2	3	4	.....	5	.....	1	.....	4	3	7	2	6	.....
26 Puerperal sepsis	5	2	2	.....	1	.....	.....	.....	1	.....	2	.....	.....	.....	.....	.....	1	1	1	.....
27 Other accidents and diseases of pregnancy and parturition	1	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
28 Congenital debility and malformation, premature birth	72	19	23	17	13	2	4	2	6	2	3	6	2	5	4	3	14	12	4	3
29 Suicide	11	3	3	4	1	.....	.....	1	1	.....	.....	.....	3	.....	1	2	1	1	.....	.....
30 Other deaths from violence	36	7	12	10	7	1	1	5	5	.....	3	3	1	3	4	3	1	2	5	.....
31 Other defined diseases	210	55	59	42	54	9	6	6	19	2	8	10	10	14	18	18	15	27	24	21
32 Causes ill-defined or unknown	13	1	3	1	8	.....	1	.....	1	.....	1	1	3	.....	1	.....	.....	2	1	2
TOTAL	1467	441	378	303	345	44	67	62	103	38	78	104	90	97	112	108	131	142	134	146

* Deaths in Hospital of persons with no fixed abode.

† See Note to Table 11 (page 128).

TABLE 3.—DEATHS DURING 1936 IN INSTITUTIONS : AND TRANSFERABLE DEATHS.

CAUSES OF DEATH.	Deaths in Institutions in the Borough.		Deaths of South Shields Residents in Institutions outside the Borough.	Transferable Deaths.	
	Residents.	Non-Residents.		Inward.	Outward.
Enteric fever .....	.....	.....	.....	.....	.....
Smallpox .....	.....	.....	.....	.....	1
Measles .....	.....	.....	.....	.....	1
Scarlet fever	5	1	.....	.....	.....
Whooping cough	1	.....	.....	.....	.....
Diphtheria	8	.....	.....	.....	.....
Influenza .....	.....	.....	1	1	.....
Encephalitis lethargica	2	2	.....	.....	2
Meningococcal meningitis .....	.....	.....	.....	.....	.....
Tuberculosis of respiratory system.....	39	8	1	1	8
Other tuberculous diseases	15	3	1	1	3
Cancer, malignant disease	58	17	6	6	17
Rheumatic fever	8	2	.....	.....	2
Diabetes	6	4	.....	.....	4
Cerebral haemorrhage, etc.	19	12	1	1	12
Heart disease.....	97	54	3	5	56
Arterio-sclerosis	5	6	.....	.....	6
Bronchitis	7	2	2	2	2
Pneumonia (all forms)	15	11	4	4	11
Other respiratory diseases	1	1	.....	.....	1
Ulcer of stomach or duodenum	10	2	3	3	2
Diarrhoea, etc.	10	5	2	2	5
Appendicitis and typhlitis	4	2	.....	.....	2
Cirrhosis of liver	1	.....	2	2	.....
Acute and chronic nephritis	15	4	.....	.....	4
Puerperal sepsis	5	3	.....	.....	3
Other accidents and diseases of pregnancy and parturition	1	2	.....	.....	2
Congenital debility and malformation, premature birth.....	16	3	1	2	3
Suicide .....	.....	2	.....	.....	2
Other deaths from violence	23	4	3	1	6
Other defined diseases	66	33	12	6	33
Causes ill-defined or unknown .....	.....	.....	.....	12	1
TOTAL	437	183	42	49	189

TABLE 4.—POPULATION, BIRTHS, AND DEATHS FOR 1936 AND PREVIOUS YEARS.

Year.	Popula- tion estimated to middle of each year.	Births.			Total Deaths registered in the Borough		Transfer- able Deaths.		Net Deaths belonging to the Borough.			
		Uncor- rected Num- ber.	Net.				Of Non-Residents registered in the Borough.	Of Residents not registered in the Borough.	Under 1 year of age.		At all Ages.	
			Num- ber.	Rate.	Num- ber.	Rate per 1,000 Net Births.			Num- ber.	Rate.		
1	2	3	4	5	6	7	8	9	10	11	12	13
1919	111,502	3,104	3,130	26.9	1,687	15.1	37	242	370	118	1,892	17.0
1920	115,945	3,922	3,966	34.2	1,738	15.0	26	288	479	121	2,000	17.2
1921	118,400	3,464	3,507	29.6	1,541	13.0	12	272	335	96	1,801	15.2
1922	122,400	3,287	3,257	26.6	1,738	14.2	109	56	307	94	1,685	13.8
1923	124,500	3,152	3,144	25.3	1,766	14.2	110	58	297	94	1,714	13.8
1924	126,600	3,087	3,071	24.3	1,910	15.1	149	70	313	102	1,831	14.5
1925	124,600	2,997	2,976	23.9	1,867	14.9	153	56	340	114	1,770	14.2
1926	123,900	2,786	2,774	22.4	1,656	13.4	159	51	241	87	1,548	12.5
1927	123,400	2,470	2,449	19.8	1,725	14.0	164	79	225	92	1,640	13.3
1928	121,800	2,500	2,468	20.3	1,766	14.5	141	74	226	92	1,699	13.9
1929	119,600	2,370	2,355	19.7	1,925	16.1	174	69	288	122	1,820	15.2
1930	116,500	2,411	2,396	20.6	1,602	13.8	133	78	221	92	1,547	13.3
1931	114,200	2,377	2,362	20.7	1,868	16.4	157	75	272	115	1,786	15.6
1932	114,000	2,168	2,168	19.0	1,632	14.3	168	63	152	70	1,527	13.4
1933	114,100	1,961	1,963	17.2	1,679	14.7	185	64	182	93	1,558	13.7
1934	112,750	2,059	2,013	17.9	1,617	14.3	180	51	168	83	1,488	13.2
1935	112,000	1,969	1,930	17.2	1,545	13.8	196	60	154	80	1,409	12.6
1936	*111,350	1,924	1,878	16.9	1,607	14.4	189	49	163	87	1,467	13.2

NOTES.—(A) The rates in Columns 5, 7, and 13 are calculated per 1,000 of the population.

(B) “ Transferable Deaths ” are deaths of persons who, having a fixed or usual residence in England or Wales, died in a district other than that in which they resided.

The large increase in the number of non-residents recorded since 1921 in column 8, and the decrease in the number of transferable deaths in column 9, is due to the Harton Poor Law Institution now being situated within the Borough.

* See note on page 13.

TABLE 5.—BIRTH-RATES, INFANT MORTALITY RATES, AND DEATH RATES FROM VARIOUS CAUSES, 1871-1936.

YEAR.	Estimated Population.	Birth-rate.	Death-rate.	PRINCIPAL EPIDEMIC DISEASES.										Phtthisis.	Other Tuberculous Diseases.	Cancer.	Bronchitis.	Pneumonia.	Influenza.	Deaths under 1 year per 1,000 births.
				Total.	Smallpox.	Measles.	Scarlet Fever.	* Diphtheria.	Whooping Cough.	" Fever."	+ Diarrhoea.									
Mean 1871-1880	50,580	43.1	25.5	6.0	.86	.42	1.44	.12	.78	.79	1.59	1.91	—	—	—	—	—	—	164	
Mean 1881-1890	66,520	38.8	20.5	2.3	.01	.34	.45	.10	.44	.19	.78	1.84	—	—	—	—	—	—	140	
Mean 1891-1900	87,022	36.1	20.1	2.45	.00	.44	.22	.11	.46	.28	.93	1.60	1.00	.63	.72	2.00	1.47	.29	166	
Mean 1901-1910	104,186	33.9	17.9	2.03	.02	.45	.17	.16	.47	.10	.66	1.50	.71	.72	.72	1.41	1.28	.25	140	
Mean 1911-1915	109,899	30.8	17.7	1.83	...	.44	.15	.09	.34	.06	.75	1.41	.58	.87	.87	1.60	1.57	.25	130	
Mean 1916-1920	109,788	27.0	18.5	1.12	.00	.31	.03	.10	.18	.02	.47	1.65	.61	.93	.93	1.84	1.77	1.44	122	
Mean 1911-1920	109,843	28.9	18.1	1.47	.00	.38	.09	.09	.26	.04	.61	1.53	.59	.90	.90	1.72	1.67	.84	126	
1921	118,400	29.6	15.2	1.37	...	.37	.03	.10	.23	.02	.62	1.44	.36	1.07	1.07	1.23	0.89	.49	96	
1922	122,400	26.6	13.8	0.51	...	...	.02	.07	.17	.01	.24	1.29	.39	.97	.97	1.30	1.30	.72	94	
1923	124,500	25.3	13.8	1.47	...	.67	.04	.08	.46	...	.22	1.40	.43	1.01	1.01	1.03	1.05	.15	94	
1924	126,600	24.3	14.5	0.69	...	.05	.06	.11	.06	.01	.40	1.28	.34	.98	.98	1.33	1.13	1.22	102	
1925	124,600	23.9	14.2	1.08	...	.28	.10	.05	.39	...	.26	1.34	.44	.99	.99	1.32	1.31	.40	114	
Mean 1921-1925	123,300	25.9	14.3	1.02	...	.27	.05	.08	.26	.01	.35	1.35	.39	1.00	1.00	1.24	1.14	.60	100	
1926	123,900	22.4	12.5	0.61	.01	.08	.02	.06	.14	.03	.27	1.16	.62	1.00	1.00	1.05	0.88	.33	87	
1927	123,400	19.8	13.3	0.51	.01	.15	...	.11	.06	...	.19	1.13	.43	1.04	1.04	1.12	1.32	.53	92	
1928	121,800	20.3	13.9	0.56	.03	.10	...	.05	.16	...	.21	1.63	.50	1.18	1.18	1.06	1.21	.36	92	
1929	119,600	19.7	15.2	0.72	...	.18	.01	.04	.20	...	.28	1.41	.54	1.30	1.30	1.05	1.74	.74	122	
1930	116,500	20.6	13.3	0.43	...	.03	.01	.13	.03	...	.24	1.25	.41	1.36	1.36	1.01	0.83	.24	92	
Mean 1926-1930	121,040	20.5	13.6	0.56	.01	.11	.01	.08	.12	.01	.24	1.31	.50	1.17	1.17	1.06	1.20	.44	97	
Mean 1921-1930	122,170	23.2	13.9	0.79	.00	.19	.03	.08	.19	.01	.29	1.33	.44	1.09	1.09	1.15	1.17	.52	98	
1931	114,200	20.7	15.6	0.77	...	.39	...	.02	.23	...	.13	1.24	.46	1.22	1.22	1.35	1.37	.60	115	
1932	114,000	19.0	13.4	0.27	...	.07	...	...	.11	...	.10	1.46	.46	1.30	1.30	0.86	0.71	.35	70	
1933	114,100	17.2	13.7	0.74	...	.31	.01	.04	.13	...	.25	1.39	.45	1.45	1.45	0.82	0.74	.44	93	
1934	112,750	17.9	13.2	0.47	...	.13	.03	.07	.09	...	.15	1.28	.47	1.26	1.26	0.77	0.84	.30	83	
1935	112,000	17.2	12.6	0.55	...	.14	.04	.11	.02	...	.24	1.06	.37	1.28	1.28	0.61	0.63	.21	80	
Mean 1931—1935	113,410	18.4	13.7	0.56	...	.21	.02	.05	.11	...	.17	1.29	.44	1.30	1.30	0.88	0.86	.38	89	
1936 †	111,350	16.9	13.2	0.43	...	.07	.05	.07	.03	...	.21	0.85	.23	1.63	1.63	0.73	0.70	.17	87	

GENERAL PROVISION OF HEALTH SERVICES.

A detailed list of the public health officers of the local authority is given on page 3.

The Public Health Services were described in detail in the Annual Report for 1930, and in subsequent reports particulars have been given of developments. There were no changes in the services provided during the year 1936 regarding laboratory facilities, ambulance facilities, domiciliary nursing, treatment centres, hospitals, administration of public assistance medical services and institutions, health visiting, infant life protection, orthopaedic treatment, etc.

During the year the Council decided to send those patients who, in the opinion of the Maternity and Child Welfare Medical Officer, required advice on birth control on medical grounds to the special clinic at Newcastle-upon-Tyne.

The Council have combined with other local authorities to provide and to extend the provision already made for the reception of mental defectives at Prudhoe Hall Colony. The colony provides, in addition, a school for those defectives who cannot be educated at a public elementary school.

At the end of the year there were 94 South Shields cases in the colony, including 19 cases sent by the Local Education Authority.

SANITARY CIRCUMSTANCES OF THE BOROUGH.

Water Supply.

Water is supplied to the borough by the Sunderland and South Shields Water Company. The water, although very hard, is pure in quality and sufficient in quantity. The following is the report of the Public Analyst on the analysis of the water. It will be observed that the total hardness is 40.6 degrees and the permanent hardness 25.3 degrees.

	Parts per 100,000.
“ Total solid matter in solution dried at 100°C.	54.600
Chlorine existing as chlorides	5.183
Ammonia	0.003
Albuminoid ammonia	0.005
Nitrogen existing as nitrates	0.069
Oxygen absorbed in 15 minutes at 25°C.	0.014
“ “ 4 hours at 25°C.....	0.020
Lead and other poisonous metals	None
Hardness before boiling, Dr. Clark’s scale 1°=1 part of calcium	40.6°
“ after boiling 1 hour, Dr. Clark’s scale carbonate per 100,000	25.3°
Appearance in two-foot tube	Colourless and clear
Smell when warmed	None
Microscopical examination of sediment.....	Satisfactory
Hardness temporary removed by boiling.....	15.3°
	Parts per 100,000
Calcium carbonate	21.90
Calcium sulphate.....	1.20
Magnesium carbonate.....	7.36
Magnesium sulphate	12.42
Magnesium nitrate	0.36
Sodium chloride	8.54
Silica	0.10
Organic matter	None
	51.88

Calculated from above :

Hardness (Total).....	42.1°
Hardness Permanent	11.5°
Hardness Temporary	30.6°
Temporary hardness calculated from alkalinity 27.0°.	

This sample was well filtered and quite free from smell even when heated. The figures relating to organic purity are all quite satisfactory. It is a very hard water, but subject to the disadvantage of such waters it is suitable for drinking and for general domestic and industrial uses.

It will be seen that the total solids have again increased.

The total hardness as determined by soap is much about the same as last year, but the temporary hardness is considerably less and the permanent hardness considerably more. This test would make it appear probable that besides having increased in quantity the dissolved solids have also altered in their proportions. But on contrasting the kinds and quantities of the dissolved solids, in the second large group of figures, this is seen not to be the case; they have increased in quantity in some cases, but they are of the same kind, and there is no outstanding change in their proportions. So, I think the difference in the temporary and permanent hardness as compared with last year must be due to the well known difficulty of correctly determining the hardness in magnesium waters by Dr. Clark's soap test, although in different determinations we obtained very good agreement.

I was disturbed by these apparent differences in the hardness when comparing this year's results with last, so, I have *calculated* the hardness from the figures concerned in the second large group, and also from the alkalinity of the water ; I give the figures obtained, from which it will be seen that the temporary hardness 30.6° and 27.0° obtained by these methods, agree sufficiently well with the temporary hardness of 25.5° as determined by soap in last year's sample.

(Signed), H. CHARLES L. BLOXAM,

Public Analyst."

Two bacteriological examinations of the water were also made.

The supply of water to two houses was cut off for non-payment of water rate ; one was subsequently restored. Before cutting off a supply, the Water Company invariably enquire from my department as to the existence of infectious disease in the house. They are not under any obligation to do so, and if there is a case of infectious disease in a house the Company do not disconnect the supply. One supply was restored on the Company being informed of the existence of a case of pneumonia in a house in which the supply had been cut off.

There has been a marked reduction in the number of houses from which the water supply has been cut off since the Sunderland and South Shields Water Company Act of 1934, under which the owner of the house undertakes the responsibility for the collection of the water rate.

Closet Accommodation.

The water carriage system is universal throughout the borough except in a few houses and farms in the area recently added to the borough. In these cases the houses are not within a reasonable distance from a public sewer.

54 additional w.c.'s were installed as a result of action taken by the Sanitary Inspectors.

Public Cleansing.

No complaints of nuisance arising from the various refuse dumps were made during the year. The cleansing of the streets and back lanes has been systematically carried out and the thoroughfares are, on the whole, maintained in a clean condition. The public could be of much more assistance in keeping the streets clean by refraining from throwing litter about as street tidies are provided and are intended to be used for depositing paper, used tram tickets, etc. They could also help in improving the appearance of the streets and the comfort and health of the community by keeping dogs under such control that the footpaths are not fouled. This nuisance appears to be on the increase. Compulsory measures may have to be adopted if complaints arising from this nuisance continue.

Sanitary Inspection.

Tables showing the classified visits paid by the inspectors, notices served and structural improvements effected will be found on pages 47 to 49. The four inspectors paid a total of 18,482 visits to premises for various purposes during the year.

Swimming Baths.

There are two swimming-baths in the borough ; one supplied by the town's water supply and equipped with a Paterson chlorinating and filtering plant, and the other an open-air swimming pool, supplied with salt water and equipped with a circulating pump and chlorinating apparatus. Frequent bacteriological examinations were made of the water from both baths during the year. The results of the examinations showed that the condition of the water was satisfactory.

Eradication of Bed Bugs.

Details of the method employed for the eradication of bed bugs and the number of houses found to be affected will be found in the section of this report which deals with housing, pages 50 to 61.

Schools.

The sanitary condition of the public elementary schools is referred to in my annual report as School Medical Officer. The Sanitary Inspectors paid 251 visits to the schools during the year. The action taken to prevent the spread of infectious disease in schools is in accordance with that recommended in the Board of Education's "Memorandum on Closure of and Exclusion from School." No schools or departments were closed on account of infectious disease during the year.

Offensive Trades.

At the end of the year there were :

69 fish friers.

3 tripe boilers (one at the abattoir).

2 gut scrapers (both at the abattoir).

2 rag and bone dealers.

1 blood boiler.

One application to "heat up" cooked fish in a cafe on the South Foreshore was refused.

All the premises are regularly inspected ; the inspectors paid over 600 visits to premises—apart from those at the abattoir where they are under constant supervision—on which offensive trades are carried on. In general, the premises are clean and well maintained and offal is removed regularly. Several of the fried fish shops have been improved by repairs and structural alterations.

Lodging Houses.

At the end of the year there were 25 lodging houses licensed to accommodate 409 seamen lodgers. The inspectors paid 432 visits to these premises and police officers paid 1,135 visits.

Under the South Shields Corporation Act, 1935, Section 87, where a room is let wholly or partially furnished to a seaman it must be regarded as a seamen's lodging house and registered as such. A practice has arisen, however, of letting single unfurnished rooms to seamen. In this way the intention of providing more effective control of lodging houses is being circumvented, with the result that as these rooms are not lodging houses within the meaning of the Act no action can be taken, and seamen, especially foreign seamen, are spreading to all parts of the town.

There were also five common lodging houses, the registration of which is subject to annual revision. They provide accommodation for 235 lodgers. 86 visits were paid by the Sanitary Inspectors and 294 by police officers to these premises. The number of boarders seems to be declining year by year. On the whole the premises are clean. Several verbal warnings on minor defects were given ; these were quickly remedied.

Houses Let-in-Lodgings.

The inspector reports that an improvement in the conditions in these houses is being maintained. Fourteen visits were paid by the inspector in whose district they are situated.

Stables and Allotments.

The inspectors paid 1,026 visits to stables and allotments during the year. Manure is regularly removed from stables, and no nuisance has arisen from accumulations in allotments. Printed notices regarding the emptying of manure steads were distributed, and there is now very little difficulty in enforcing the regulations. The few remaining manure steads have been so treated as to render them impervious.

Rat Repression.

There were few complaints of rats infesting premises. The inspectors paid 475 visits to premises said to be harbouring rats. In every case where rats are found the inspectors by suggesting the necessity of structural alterations and repairs and by advice on trapping, laying of bait, etc., are able to report the premises free from the vermin. Posters on the destruction of rats were exhibited in various parts of the borough, and the provisions of the Act were advertised in a local newspaper during the " Rat Week " in November.

Theatres and Cinemas.

There are 12 cinemas and one theatre in the town. The inspectors paid 127 visits and in every case found a high standard of cleanliness and satisfactory ventilation.

Rag Flock Acts 1911 to 1928.

No action under these Acts was necessary during the year.

Exhumations.

Three applications for the removal from one grave and re-interment in another at Harton Cemetery were granted by the Home Office. In two instances the operations were carried out under the supervision of a sanitary inspector, with due care and decency early in the morning. In the third case on re-opening the grave the coffin and remains were in such a state of decomposition that removal was impossible, and the grave had to be filled in again.

An experience of some of these operations is anything but pleasant and would, more than any other means, promote the universal adoption of cremation as the most hygienic and economic method of the disposal of the dead, as in this and in some former exhumations, the conditions were such as to suggest the necessity for a time limit being imposed, on the expiration of which removals would not be allowed.

Factories, Workshops, etc.

The Inspectors paid 1,221 visits during the year. The following are the details.

1. Factories (including Factory Laundries).
Inspections, 44 ; Notices, 1.
2. Workshops (including Workshop Laundries).
Inspections, 351 ; Notices, 2.
3. Workplaces (other than Outworkers' Premises).
Inspections, 826 ; Notices, —.

The defects found are summarised as follows :—

Particulars of Defect.	Number of Defects.			
	Found.	Remedied.	Receiving attention.	Referred to H.M. Inspector.
<i>Nuisances under the Public Health Acts :*</i>				
Want of cleanliness	4	3	1	..
Want of ventilation	..	..	..	..
Overcrowding	..	..	..	..
Want of drainage of floors	..	..	..	..
Other nuisances.....	3	2	1	..
Sanitary accommodation—				
Insufficient	..	..	..	..
Unsuitable or defective ..	..	..	..	..
Not separate for sexes	1	..	1	..
<i>Offences under Factory and Workshop Act :</i>				
Illegal occupation of underground bakehouse (s. 101) ..	..	..	..	..
Breach of special sanitary requirements for bakehouses (s. 97 to 100)	..	..	..	..
Other offences (excluding offences relating to Outwork)	..	..	..	..
Total	8	5	3	..

*Including those specified in sections 2, 3, 7 and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

The number of workshops on the Register at the end of the year was 227. The principal trades are :—

Dressmakers, Tailors, Milliners, etc.	47
Boot Repairers	17
Bakers	43*
Joiners, Upholsterers, etc.....	39
Smiths	4
Plumbers	10

* Exclusive of 11 factory bakehouses.

Only one Outworker, engaged as a Contractor in the making of wearing apparel, was notified to me during the year.

Inspections under the Shops Acts.

NUMBER OF SHOPS.

Number of Shops on Register at 31st December, 1936 :

Occupied	1,994
Vacant	186
	2,180

159 of the shops are in dwelling houses.

Assistants are employed as follows :—

In 363 shops, over 18 years of age only :

„ 542	„	under and over 18 years of age :
„ 280	„	under 18 years of age :
„ 809	„	no assistants employed.

The number of premises on the register, which are licensed for the sale of intoxicating liquors, to be consumed on the premises, is 121.

In these licensed premises assistants are employed as follows :—

In 112 premises, over 18 years of age only.

„ 5	„	under and over 18 years of age.
„ 4	„	no assistants employed.

Number of visits paid to shops (including stalls in Market Place, stalls and cafes on foreshore and licensed premises)

	1,932
Interviews and appointments	138
Complaints received and investigated	30

INFRINGEMENTS OF THE SHOPS ACTS, 1921 to 1934 :

Non-observance of Early Closing Day	20
Early Closing Day notices not exhibited	65
Early Closing Day notices not properly posted	9
Prescribed forms of notices as to Assistants weekly half holiday not exhibited	53
Prescribed forms of notices as to Assistants weekly half holiday not kept up to date	12
Employing assistants on their weekly half-holiday after 1-30 p.m.	2
Assistants not receiving meal hours	1
Records of Hours of employment of Young Persons not being kept up to date, also forms and notices required in respect of the employment of Young Persons (1934 Act) not being exhibited	325

Record of hours of employment of Young Persons not being kept up to date.....	11
Young Persons being employed between the hours of ten p.m. and six a.m.	6
Young Persons being employed over the permitted hours	1
Reasonable temperature not being provided or maintained in shops	3
Insufficient and unsuitable facilities for the taking of meals in shops	2
Seats not being provided for the use of female shop assistants	2
Insufficient and unsuitable sanitary accommodation ..	28
Trading after hours	65
	605

497 of these infringements were first offences, and the persons in default were cautioned and instructed by the Inspector—440 by written intimation and 57 verbally.

108 of these contraventions were reported to the Health Committee, as follows :—

Grocers	22
Butchers	14
Confectioners	13
Fruiterers	11
Drapers, etc.	10
Refreshment Caterers	7
Fish Friers	6
Fresh Fish Dealers	6
Hairdressers	5
Tobacconists	5
Bakers	2
Newsagents	3
Licensed Victuallers	1
Ironmongers	1
Boot and Shoe Dealers	1
Boot and Shoe Repairers	1

In 72 cases letters of caution were on the instruction of the Committee sent by the Town Clerk, and in 36 cases Court proceedings were taken.

34 of the defaulters were convicted, fines being imposed as follows :—

One	.....	at	40/-
Four	.....	at	20/-
Twenty-eight	..	at	10/-
One	.....	at	5/-

Two cases were dismissed, one a market stall holder (fruiterer) being cautioned.

The prosecutions were for the following infringements :—

Trading after hours :

Grocers	.....	11
Confectioners	.....	5
Fruiters	.....	3
„ (Market stalls)	.....	2
	—	5
Tobacconists	.....	3
Butchers (Market stalls)	.....	2
Drapers, etc.	.....	2
Refreshment Caterers	.....	1

Non-observance of Early Closing Day :

Drapers, etc.		2
---------------	-------	---

Record of Hours of Employment of Young persons not being kept :

Refreshment Caterers		1
----------------------	-------	---

Employing Young Persons between the hours of 10 p.m. and 6 a.m. :

Refreshment Caterers	.....	2
Fruiters	.....	1
Grocers	.....	1

—
36
=

ADMINISTRATION.

In respect of the infringements of not providing or maintaining reasonable temperature in shops, not providing suitable and sufficient facilities for the taking of meals in shops, and not providing seats for female shop assistants, the shopkeepers rectified each of the contraventions.

In five shops extra sanitary conveniences were provided, one shop has become unoccupied, and in the remaining 22 shops the sanitary conveniences have been made suitable.

849 circulars explaining the Shops Acts, 1912 and 1913, the Shops (Hours of Closing) Act, 1928, the Hairdressers' and Barbers' (Sunday Closing) Act, 1930, the Shops Act, 1934 (Employment of Young Persons, etc.); 113 copies of the second schedule of the Shops Act, 1912, stating the Trades and Businesses which are exempted from the provisions as to weekly half-holidays; and 131 circulars in respect of the Pharmacy and Poisons Act, 1933, have been issued to shop-keepers. 126 circulars have been sent to Butchers in respect of The Retail Meat Dealers' Shops (Sunday Closing) Act, 1936, which came into operation on 1st January, 1937.

The operation of the provisions of the Shops (Hours of Closing) Act, 1928, were suspended by order of the Town Council on Good Friday Eve, 9th April, 1936, and by order of the Home Secretary from the 18th December, 1936, to 24th December, 1936, both days inclusive.

SHOPS ACTS AND ORDERS.

The Acts which are under the supervision of the Shops Inspector are :—

1. The Shops Act, 1912 :
(An Act to consolidate the Shops Regulations Acts, 1892 to 1911) ;
2. The Shops Act, 1913 :
(An Act to amend the Shops Act, 1912, in its application to premises for the sale of refreshments).
3. The Shops (Hours of Closing) Act, 1928 :
(An Act to amend the law relating to the Closing of Shops ; and for purposes connected therewith).
4. The Shops Act, 1934 :
(An Act to regulate the hours of employment of persons under the age of eighteen years, and to make provision as to arrangements in shops and warehouses for the health and comfort of workers).
5. The Shops Act, 1936 :
(An Act which came into operation on 1st January 1937 to provide for the application of Shops Acts, 1912 to 1934, to premises and places where the business of lending books or periodicals is carried on for the purpose of gain).

These Acts together, are cited as the Shops Acts, 1912 to 1936.

6. The Hairdressers' and Barbers' Shops (Sunday Closing) Act, 1930 :

(An Act to provide for the compulsory closing of hairdressers' and barbers' shops on Sundays).

7. The Retail Meat Dealers' Shops (Sunday Closing) Act, 1936 :

(An Act to provide with certain exceptions, for the compulsory closing of retail meat traders' shops and stalls on Sundays).

Under the 1912 Act the following Orders are in force :—

1. The Hairdressers' Weekly Half Holiday Order, 1913.
2. The South Shields Butchers' Half Holiday Order, 1915.
3. The South Shields Butchers' Closing Order, 1920.
4. The South Shields Pork Butchers' Closing Order, 1921.
5. The South Shields Hairdressers' Closing Order, 1922.
6. The South Shields Drapers', etc., Weekly Half Holiday Order, 1925.
7. The South Shields Drapers', etc., Closing Order, 1925.
8. The Fresh Fish Dealers' Weekly Half Holiday Order, 1935.

The Drapers', etc., Orders apply to the trade or business of a Draper, Milliner, Clothier, Mercer or Outfitter.

225 copies of the above-named Orders were issued to traders as follows :—

Half Holiday Orders :

Fresh Fish Dealers	39
Drapers, etc.	33
Hairdressers	31
Butchers	28

Closing Orders :

Drapers, etc.	33
Hairdressers	31
Butchers	28
Pork Butchers	2

The following special orders are also in force :—

1. The South Shields Holiday Resort Order, 1912, which suspends the obligation to close all shops on the weekly half holiday during the months of June, July, August and September in each year.
2. The Ocean Road Exempted Area Order (Stationers, etc.), which includes the retail trade or business of a Stationer, Picture Post Card Dealers, Fancy Goods, and Toy Dealers, and exempts all shops in that area from closing for the serving of customers with those goods or articles on the weekly half holiday.
3. The Tyne Dock Exempted Area Order (Grocers, etc.), which includes the retail trade or business of a Grocer, Draper, Barber, Boot Dealer or Ship Store Merchant, and exempts all shops in that area of those classes of trades or businesses from the closing for the weekly half-holiday.
4. The South Shields Stationers' Exempted Order, 1914, which applies to the retail trade of a Stationer in all shops in the Borough, and exempts them from the closing for the weekly half holiday.

Ten copies of the Holiday Resort Order, 1912, were issued to shop-keepers.

**TABLE 6.—SUMMARY OF VISITS AND INSPECTIONS PAID BY
SANITARY INSPECTORS.**

NATURE OF VISIT.	Weir. R. W.	W. Smith.	C. Skelton.	J. W. McVay.	* P. Graham.	§ S. Harkness.	Total.
General district inspection (including housing inspection and inspection of underground rooms)	2,006	1,689	1,742	1,309	384	223	7,353
Inspection of repairs to property	73	400	730	730	210	62	2,205
Interviews and appointments ..	43	95	228	144	39	13	562
Investigation of complaints of nuisances	73	232	274	314	31	37	961
Smoke observation	..	19	..	7	..	..	26
Testing drains	..	..	..	41	5	..	46
Exhumations	..	3	..	..	..	..	3
Special Inspections—							
Seamen's lodging houses	..	55	170	190	6	11	432
Common lodging houses	..	18	12	46	3	7	86
Houses let-in-lodgings	..	14	..	..	..	..	14
Homeworkers' premises	2	..	..	..	..	..	2
Van dwellings	..	52	46	..	146	..	244
Picture halls	100	12	..	11	3	1	127
Fried fish shops.....	264	62	164	58	14	23	585
Bakehouses	10	17	66	25	6	17	141
Ice cream shops.....	..	3	17	2	..	..	22
Marine stores.....	..	..	19	..	..	..	19
Other factories	..	13	9	11	..	..	33
Other workshops	8	41	58	65	13	..	185
Yards	1,229	..	..	..	..	..	1,229
Stables and allotments.....	667	91	243	6	19	..	1,026
Refuse tips.....	80	33	11	52	1	..	177
Rat and vermin repression ..	5	162	109	160	35	4	475
School latrines	180	15	2	39	8	7	251
Food poisoning	..	..	12	..	..	..	12
At Abattoir with Food Insp.	..	..	..	..	..	28	28
Taking samples with Food Inspector	..	..	..	..	..	19	19
Taking water samples	..	2	..	..	..	2	4
Other visits	93	..	..	..	..	..	93
Visits <i>re</i> cases of infectious disease : on notification of cases : or on disinfection of premises	328	590	418	477	92	52	1,957
Re cases of tuberculosis	13	10	23	21	12	..	79
Contacts of enteric fever, etc. ..	13	38	4	25	6	..	86
Total visits	5,187	3,666	4,357	3,733	1,033	506	18,482

* Commenced 4/5/36 ; left 25/7/36.

§ Commenced 9/11/36.

TABLE 7.—SUMMARY OF NOTICES ISSUED BY SANITARY INSPECTORS.

NATURE OF WORK.	R. W. Weir.	W. Smith.	C. Skelton.	J. W. McVay.	*P. Graham.	†S. Harkness.	Total.
<i>Preliminary Notices were served on 393 Property Owners for</i>							
(A) Houses not kept in all respects reasonably fit for habitation	9	58	127	96	8	9	307
(B) Nuisances caused by—							
Overcrowded house	..	..	1	..	..	..	1
Drains choked or defective	3	8	14	12	5	1	43
W.c.'s defective	1	1	4	4	..	..	10
Scullery sinks defective ..	1	1	9	1	..	..	12
Rat infected premises	..	..	4	..	..	..	4
Refuse accumulations	..	..	1	..	1	..	2
Wastepipes defective	1	..	4	4	..	..	9
Absence of proper water supply	..	..	..	..	1	..	1
W.c. accommodation insufficient.....	..	..	1	..	..	..	1
Yard paving defective	..	1	3	1	..	..	5
Minor defects.....	..	6	18	11	..	..	35
<i>Preliminary Notices were served on 19 Tenants for—</i>							
Dwellings overcrowded....	..	..	1	..	..	..	1
Rooms dirty	..	1	1	2	..	..	4
Drains or w.c. choked	..	1	1	..	..	..	2
Refuse accumulations	..	1	3	4	1	..	9
Keeping animals	..	..	1	..	1	..	2
<i>Statutory Notices: On Owners Under Public Health Acts</i>	..	..	4	1	..	..	5
<i>Statutory Notices : On Occupiers—</i>							
Under Public Health Act, 1875.....	..	..	..	..	..	..	..

Apart from the service of formal and informal notices many nuisances are dealt with by verbal requests from the Sanitary Inspectors to occupiers and owners. Any structural improvements effected as a result are included in table 8 (page 49).

* From 4-5-36 to 25-7-36.

† Commenced 9-11-36.

TABLE 8.—STRUCTURAL IMPROVEMENTS EFFECTED.

NATURE OF WORK.	R. W. Weir.	W. Smith.	C. Skelton.	J. W. McVay.	*P. Graham.	†S. Harkness.	Total.
Houses : closed or demolished†	..	..	..	..	..	..	..
generally improved ..	29	121	235	113	25	5	528
Drains : provided	7	48	..	15	1	..	71
relaid	..	8	16	2	3	..	29
repaired	..	4	28	16	7	1	56
chambers, gulleys, traps, etc., provided or renewed.....	9	..	..	8	1	..	18
Yards and Areas : relaid	9	2	19	5	1	..	36
repaired ..	3	8	15	3	..	..	29
W.C.'s : newly provided (com- plete)	1	36	12	5	..	..	54
basins, cisterns, etc., replaced or repaired	12	3	16	12	..	..	43
Dustbins : provided (portable)..	..	11	12	3	..	..	26
Urinals : reconstructed	..	2	..	..	..	..	2
Baths : repaired	1	21	..	1	..	..	23
Washups : of metal, replaced by stoneware	..	8	28	2	..	..	38
newly provided (complete)	8	18	12	12	1	..	41
traps, waste pipes, etc., provided or repaired	5	3	20	3	1	..	32
Lavatories : traps, etc., pro- vided	..	4	..	..	..	..	4
Rainwater cisterns (under- ground) : filled in.....	..	3	6	2	..	..	11
Wash-houses : provided or built	..	2	42	..	..	..	44
rebuilt or repaired	2	9	3	13	4	1	32
floors relaid or repaired	..	4	..	..	..	..	4
Out-buildings : provided, re- built or repaired	27	14	84	32	4	1	162
Stables : generally improved ..	..	3	4	..	..	..	7
Public House : drains repaired	..	..	..	1	..	..	1
Workshops : repaired	..	2	..	..	..	..	2

‡ Exclusive of Clearance Areas (see page 51).

* From 4-5-36 to 25-7-36.

† Commenced 9-11-36.

HOUSING.

At the end of 1936 there were, according to the Rate Books, 30,619 inhabited houses in the Borough.

There are 10,391 houses registered as decontrolled houses under Section 2 of the Rent and Mortgage Interest Restriction (Amendment) Act, 1933, but this number does not take any account of any alteration owing to clearance of areas, as there is no machinery provided by the Rent etc., Acts, for the amendment of the register apart from the various decisions in the County Court.

New Houses.

During 1936, 425 self-contained houses and 48 houses of flats (96 tenements) were erected by private enterprise: 368 self-contained houses were built by the Council under the Housing Act, 1930, in addition to 20 houses for aged persons. Those built by private enterprise are situate at Grosvenor Road, Harton Rise, Mortimer Road, Sunnyside, Coast Road, and Marsden Road, and the Sutton Estate, while those built by the Council are at Wenlock Road, Prince Edward Road and Richardson Terrace.

Situation of building operations during the year :—

Wenlock Road (last houses of scheme)	6 houses
Prince Edward Road (Contract No. 1)	326 „
„ „ („ No. 2)	468 „
Boldon Lane and Harton Colliery	76 „
Richardson Terrace	56 „
Dean Road and Reed Street	10 „
	942 „

Under the powers of the Housing Act, 1930, the Town Council have made considerable progress in the elimination of unfit dwelling houses and the re-housing of the tenants.

The following summarised report shows the progress made to the end of 1936 :

TABLE A.

Year.	Clearance Area.	Displaced.		New Estates.	Houses.
		Fami- lies.	Per- sons.		
1932-3	Thames Street....	448	1,818	Stanley Street and Deans	316
1933 ..	Mitre Street	194	721	Egerton Road and Green Lane ..	432
1933-4	Drake's Street ..	53	262	West Harton	342
1934 ..	Laygate Square ..	15	35	do.	..
1935 ..	Holborn	552	2,249	do. and Wenlock Road	148
1936 ..	Harton Colliery ..	129	536	Prince Edward Road, etc.	362
1936 ..	Cornwallis Square	122	444	Prince Edward Rd.	..
1936 ..	Edward Street ..	16	53	do.	..
1936 ..	Brunswick Street	100	384	do.	..
1931-6	Individual Unfit Houses	293	1,205	In various estates	..
	Totals	1,922	7,707		1,600

In addition, 284 bungalows were built for aged couples, who are not included under " persons displaced."

Re-Housing.

The following houses are in the course of erection or sites are being prepared, by the North Eastern Housing Association (with the exception of the houses in Reed Street which are being built by the Corporation under contract) :

Prince Edward Road	468
Boldon Lane	76
Reed Street	10
Cornwallis Square	40
Commercial Road	46

Making a total of 640 houses

These houses will provide for families to be displaced from the following areas, for which Compulsory Purchase Orders were confirmed in December, 1936, subsequent to a Ministry of Health Inquiry in October :—

	Families.	Persons.
Anderson Street	27	95
Commercial Road	64	231
Felt Terrace	15	48
Percy Street	39	147
Waterloo Vale	161	541
Wellington Street.....	242	868
Totals	548	1,930

In addition, there are 12 families in individual unfit houses to be displaced, making a total of 560.

It was expected that some of these new houses would be ready for occupation in March, 1937, but it is improbable that the Prince Edward Road Scheme will be completed by the end of that year.

On the other hand, it is expected that by September, 1937, a number of the 86 houses will be ready at Cornwallis Square, for which the contract is now being let.

Other building schemes for which contracts are being sought by the Council include :

	<i>Houses.</i>	<i>Year.</i>
Quarry Lane.....	195	1938
Horsley Hill.....	692	1938
Marsden Road.....	652	1938
	<u>1,539</u>	

Early in 1938 a number of these 1,539 houses should be ready for tenants.

The 1933 clearance area programme is nearing completion, only three small areas of about 60 houses remaining. Other areas have been added and are being dealt with, namely :—

Anderson Street (27), Commercial Road (64), Felt Terrace (15), and Percy Street (39), making 145 of the 548 families shown above.

Two areas scheduled in 1933 for improvement, I now consider should be cleared, by compulsory purchase orders, namely :

Catherine Street	162 families.
Alderson Street	109 „

Other areas are maturing, but the boundaries are not so well-defined as in the earlier days of Thames Street, Holborn and Mitre Street areas. For instance, in the populous district between Maxwell Street and Adelaide Street, there are bad patches, suitable for small clearance schemes, or general treatment.

This also applies to those other densely occupied districts between Eldon Street and Palmerston Street and Tyne Dock, behind Slake Terrace, to the passenger railway. In all three areas, the dwelling house standard is low, a majority might be considered unfit for habitation, though here and there there are exceptions.

It is from these areas that a considerable number of families should be displaced to occupy the 1,539 new houses due in 1938.

Then there are individual unfit houses and cellar dwellings in other parts of the town, which will have to be dealt with.

The Effects of Re-Housing.

During the year the following report was submitted to the Health Committee for their information, on the effects of re-housing.

In connection with the procedure for the scheduling and clearance of unhealthy areas, not only was actual structural and sanitary conditions of the houses taken into account, but the environmental circumstances as reflected in the death rate were also stressed. Latterly for small areas the death rates were not quoted in evidence at the Inquiries by Inspectors of the Ministry of Health, as fallacies are likely to arise owing to the relative smallness of the populations involved. In the Thames Street, Mitre Street, and Holborn areas, however, where the respective numbers of inhabitants affected by the proposed clearances were large, the death rates were quoted and averaged over a period of ten years. The following is a summary of the area death rates, population, etc., as given in the evidence at the time of the inquiries :

AREA.	Number of Deaths.	Death Rate.	No. of Deaths from tuber- culosis.	Tuber- culosis • Death Rate.	Estimated Popu- lation.
Thames Street....	477	27.3	75	4.29	1,750
Mitre Street.....	163	21.7	24	3.20	750
Holborn*	442	24.0	58	3.14	1,850
Drake Street	45	20.0	8	3.55	253
Laygate Square ..	16	47.1	..	..	34
Total	1,143	24.7	165	3.56	4,637

* Exclusive of Arabs.

The ten years periods covered by the vital statistics were :

Thames Street.....	1921—1930
Mitre Street	1922—1931
Drake Street.....	1923—1932
Laygate Square	1923—1932
Holborn	1924—1933

It will be observed that in the five unhealthy areas specified, the estimated average total population dealt with was 4,637 persons. The deaths in the ten-year periods amounted to 1,143, giving an average annual death rate of 24.7 per thousand of the population. Similarly, tuberculosis caused 165 deaths in these areas and caused a death rate of 3.56 (exclusive of Arabs). The average death rate for the whole town was 14.0 and the tuberculosis death rate was 1.78.

Transference of the population commenced about April, 1932, with the Thames Street area, followed by Mitre Street residents and Holborn, with in addition a number of residents from individual unfit houses not in the clearance areas. This re-housing progressed with varying speed, as shown in the following table, which gives the number of new houses occupied in the new areas and the number of persons re-housed :

<i>Quarter Ended.</i>	<i>New Houses Occupied.</i>	<i>Persons Re-housed.</i>
30-6-32	175	853
30-9-32	205	1,059
31-12-32	99	372
31-3-33	27	174
30-6-33	218	933
30-9-33	19	141
31-12-33	5	13
31-3-34	..	..
30-6-34	..	..
30-9-34	..	..
31-12-34	45	204
31-3-35	77	456
30-6-35	96	438
30-9-35	134	598
31-12-35	132	616
31-3-36	6	28
30-6-36	76	372
Total	1,314	6,257

For instance, in the quarter ended 30th June, 1932, 175 new houses were occupied by 853 persons. In the next quarter a further 205 houses were provided for 1,059 persons, making 380 houses for 1,912 occupiers (men, women and children), and so on till by the end of June, 1936, a total of 1,314 houses had been provided for the re-housing of 6,257 persons from unhealthy clearance areas and individual unfit houses.

From the time this re-housing was commenced records were kept in my department of the deaths which have occurred in the new housing areas. It is interesting to note that in the $4\frac{1}{2}$ years which have elapsed since April, 1932 (when re-housing commenced) there have been 185 deaths, which on an estimated average annual population of 3,791 gives a death rate of 11.5 per thousand population, and a tuberculosis death rate of 0.92.

If the death rate had remained at the same rate as in the ten-year period before re-housing took place, the number of deaths in the new areas during the past $4\frac{1}{2}$ years would have been 391. Actually there were 185 deaths.

Again, tuberculosis caused 14 per cent. of all the deaths in the unhealthy areas. Since re-housing the percentage in the areas is only eight.

These are most striking reductions and while one would not claim that the reduction is entirely due to better housing conditions, such improvement in housing has no doubt largely contributed to effect a lower death rate.

The decrease in the death rate is so pronounced that even if a reasonable margin of error is allowed in the estimation of the population, the reduction in the death rates is still noteworthy.

It should be mentioned that the average death rate for the whole of the Borough of South Shields for the past $4\frac{1}{2}$ years is 13.5 and the tuberculosis death rate for the town for the same period is 1.24.

Overcrowding.

Apart from unfitness of houses, there is the question of overcrowding. According to the survey of 1936, 14.5 per cent. of the houses in the borough are overcrowded, and it would appear that 2,161 houses will be required to abate overcrowding. The details as to how this estimate is calculated are set out in the following table.

HOUSING ACT, 1935.

MINIMUM NUMBER OF HOUSES REQUIRED FOR ABATEMENT OF OVERCROWDING AS ON 1ST APRIL, 1936, (WHOLE COUNTY BOROUGH AS NOW EXTENDED EXCEPT FOR AREAS SCHEDULED FOR CLEARANCE).

Group.	Equiva- lent Adults in each family in group.	No. of fami- lies.	Accommoda- tion required in Equivalent Adults (and rooms).	Houses made available by Transfer.	Houses now empty.	New Houses required.
A.	2½ and 3	197	3 (2)	197+	..	..
B. ..	3½ to 5	49	5 (3)	49+	..	..
C. ..	6 and 6½	5	7½ (4)	5+	..	..
D. ..	3½ to 5	1,853	5 (3)	534 49	..	..
E. ..	5½ to 7½	403	7½ (4)	485 89 5	54	1,314
F. ..	8 to 9	26	10 (5)	84 1	64	255
G. ..	5½ to 7½	498	7½ (4)	..	..	25
H. ..	8 to 10	35	10 (5)	..	..	498
K. ..	10½	1	12 (6)	..	27	8
L. ..	8 to 10	87	10 (5)	..	..	1
M. ..	10½ & 11	2	12 (6)	..	30	57
N. ..	10½	1	12 (6)	..	..	2
					175	1
Minimum number of New Houses required						2,161

Equivalent Adults.	(Rooms).	New Houses required.
5	(3)	1,314
7½	(4)	753
10	(5)	90
12	(6)	4
		2,161

This assumes :—

- (1) That every house made available by transfer is used to full capacity according to scale.
- (2) That all empty houses shewn above are utilised for this purpose.

The 27 families of two persons aged 10 or more, overcrowded by reason of living in one room, will have ample accommodation in two rooms available by reason of transfers.

If 1,000 houses were provided as a first instalment it would be possible to form a more accurate estimate of the total number required. This would reduce overcrowding and release single rooms and small tenements which could be made into larger tenements, and the one roomed tenement would disappear. Existing houses would be improved ; the old type, which houses four families on one stairhead, could easily be made into a four-roomed tenement, comprising a kitchen and three bedrooms, and would meet the needs of families of 6 and 7 persons. Such alteration, with sinks and food stores, etc., could be done at little cost. Owners could not expect to get the same amount from one tenant as from the four previously, but this alteration would safeguard their property from having derelict parts. In this connection two points must be emphasised : (1) The 2,200 Corporation houses, built or building, do not add one to the total, as in their place an equal number of tenements is destroyed. (2) For every house built by the Corporation to abate overcrowding, a corresponding tenement will be released. Thus, there will be a surplus of one and two-roomed tenements, which owners will find difficult to let, so as to comply with overcrowding regulations.

There is no doubt that many houses will lend themselves to this treatment, the conversion of tenements into flats and flats into houses, and thus take them outside the scope of the Housing Acts for several years.

Already there are signs of this reaction in Winchester Street and district, where good, self-contained houses have been allowed to degenerate in recent years into single-roomed tenements. Owners are well-advised to recondition these houses, partly by building up the basements and cutting off the attics and thus make five or six-roomed houses with modern amenities. Two owners have voluntarily done this, and if their example is followed, a large part of Winchester Street district could be restored to respectable dwellings and saved from slumdom and the operation of the Housing Act. Another part of Winchester Street, almost a quarter, has been turned into offices, which are a great improvement on the squalid tenements.

How many empty houses there will be, depends on the number the Council build to deal with overcrowding. Obviously they should not build the small type for this purpose ; nothing less than A3 and A4 with increased dimensions of rooms to suit the larger

families. Herein, there should be a clear understanding as to the "permitted number" for these new houses, whether it is to be on the 1930 Act basis (*i.e.*, persons), or on the 1935 Act (*i.e.*, equivalent adults).

It will be seen from the table that the greatest number of houses would appear to be required for families of from 5 to $7\frac{1}{2}$ equivalent adults, and that the larger type of house would be required. It should be emphasised that the size of the family unit is decreasing; this is borne out by a special survey of seven areas under consideration for action under the Housing Act, 1930. In these areas no less than 57 per cent. of the families were composed of three persons or less.

While it will be necessary to provide a certain number of the three and four bedroom type of house the proportion to be provided of this size of house to that containing two bedrooms ought to receive very careful consideration.

To sum up, it seems reasonable that a certain number of houses now being built, say 500, should be set apart at once for overcrowding, so that the abatement of the worst cases and clearance schemes could proceed simultaneously: then the effect could be measured and future policy indicated.

The housing of coloured men and their families should be given further consideration. Unfortunately these people are in some of the worst houses; there are 35 families of 120 persons in the next areas to be cleared, and in the displacement they are forced by exchange into other unsatisfactory parts, causing further depreciation of poor premises. Part of the new Commercial Road estates might be set apart for them.

In the clearance areas already dealt with there were 318 instances of overcrowding. These have all been relieved.

Repair of Houses.

572 defective dwelling houses were rendered fit for habitation during the year as a result of action taken by the Housing and Sanitary Inspectors.

Rent Acts.

No application was received for a certificate under the Rent, etc., Restriction Acts.

Eradication of Bed Bugs.

Before any tenant is allowed into a Council house, all furniture must be freed from bed bugs. This disinfection is done by the tenant with the co-operation of the Housing Inspectors. Where necessary a quantity of kerosene and soft soap emulsion is given and a hand-sprayer lent to the tenant. Every tenant is given a printed sheet of advice on the eradication of bugs. It is wonderful how effective the simple instructive methods are, backed up by hot water and supervision.

The people are also encouraged to burn old picture frames and other articles of little value, and to take with them into the new houses as little woodwork as possible. The tenants of condemned houses vie one with another in cleansing their wire mattresses, desk-beds, etc., so that when their turn comes for a new house the keys will not be withheld. There have been extremely few cases where bugs have been transferred to new houses, and these occurred in the early days of re-housing in 1932. Where bugs are found in Council houses similar methods are adopted with the furniture and rooms.

If necessary, the door mouldings, skirting boards and picture rails are removed and cleaned and the plaster crevices sprayed with reliable insecticides by the Housing Inspector, who, from the beginning, secures the close co-operation of the tenant. Infested parts are pointed out and these receive special and persistent attention.

In the worst Council house case this year, a really bad one, some old articles of furniture had to be burnt, but in the end the bugs were completely eradicated from all parts of the house.

Thirty-six Council houses were found to be infested and 86 other houses. All (122) were disinfested in accordance with the procedure indicated above.

Administration.

The work of the Sanitary and Housing Inspectors is summarised in the following statistics, which do not include inspection and action regarding Clearance Areas.

1.—*Inspection of dwelling-houses during the year :—*

(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	6,111
(b) Number of inspections made for the purpose ..	9,122

(2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925	73
(b) Number of inspections made for the purpose ..	73
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	39
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	640*
2.— <i>Remedy of defects during the year without service of formal notices :—</i>	
Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers.....	563*
3.— <i>Action under statutory powers during the year :—</i>	
A. Proceedings under sections 17, 18 and 23 of the Housing Act, 1930:	
(1) Number of dwelling-houses in respect of which notices were served requiring repairs	..
(2) Number of dwelling-houses which were rendered fit after service of formal notices :—	
(a) By Owners	..
(b) By local authority in default of owners ..	..
B. Proceedings under Public Health Acts :	
(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	5
(2) Number of dwelling-houses in which defects were remedied after service of formal notices :	
(a) By Owners	9
(b) By local authority in default of owners ..	..

* Drainage defects and external nuisances excluded.

C. Proceedings under sections 19 and 21 of the Housing Act, 1930 :

(1) Number of dwelling-houses in respect of which Demolition Orders were made	70
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders	8

D. Proceedings under section 20 of the Housing Act, 1930 :

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made	38
(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit	2

4.—*Housing Act, 1935.—Overcrowding.*

(a) (1) Number of dwellings overcrowded at the end of the year	3,955
(2) Number of families dwelling therein	3,955
(3) Number of persons dwelling therein	15,820
(b) Number of new cases of overcrowding reported during the year	None.
(c) (1) Number of cases of overcrowding relieved during the year (from clearance areas)	138
(2) Number of persons concerned in such cases	751

Fair Rents Information Bureau.

This Bureau was established in May, 1935. The following statement supplied by the Borough Treasurer summarises the work done during 1936 :—

Inquiries with regard to rents—

from tenants of controlled property	933
from tenants of de-controlled property	885
Inquiries from landlords	47
Miscellaneous inquiries	195

2,060

Cash reported to Bureau as refunded £359

The miscellaneous inquiries have dealt with Warrants of Distress, Notices to Quit, Computation of Arrears and duties as to repairs.

INSPECTION AND SUPERVISION OF FOOD.

Milk Supply.

During the year quarterly examinations of all milch cows within the Borough were carried out by the Veterinary Inspector. The following table shows the number of farms visited and the number of animals examined each quarter :—

	<i>March.</i>	<i>June.</i>	<i>September.</i>	<i>December.</i>
Number of Farms . .	7	11	10	10
Number of Animals . .	82	164	163	166

The number of farms visited each quarter varied owing to the following reasons :—

1. The extension of the Borough, which came into force on April 1st, 1936, brought in five farms, and at the same time
2. The East Jarrow area of South Shields given up to the Borough of Jarrow removed one farm.
3. One farmer within the old Borough boundary gave up dairy farming between the second and third quarterly visits.

The net increase of the number of dairy farms is, therefore, three, making a total of ten, the approximate number of cows being 166.

The Veterinary Inspector reports the general condition of the herds to be good, and the methods of milk production satisfactory. No notifications under the Tuberculosis Order, 1925, were received during the year, but three animals were kept under observation.

22 samples of milk were taken and sent for biological test for tubercle bacilli ; of these 19 were from the herds at local dairy farms and three from distant farms, being supplies intended for schools.

Of the 22 samples taken, the results of the tests of 17 were negative, one was positive and four results were inconclusive owing to the death of the guinea pigs due to septicaemia. With regard to the positive sample taken at a local farm, a further examination of the herd was carried out by the Veterinary Inspector and as no definite clinical symptoms of tuberculosis were found further inquiries were made, and it was found that two animals had been sold for slaughter. In addition, a further sample from the bulk supply of milk of the herd was taken in 1937 and sent for biological test. The result of the test was negative.

23 further samples of milk were taken for bacteriological examination. These include 13 from the ten farms within the borough ; three on delivery from farms outside but in the near vicinity of the borough ; six samples taken on delivery by motor from distant farms, and one of mixed milk at a local dairy.

Four of the samples were taken from bulk supplies intended for delivery at schools within the Borough.

The attention of four local milk producers was drawn to the coliform content of their samples. Subsequent samples were found to be much cleaner.

The results of the examinations are as follows :—

Sample Number.	Total number of micro-organisms per 1 cubic centimetre.	Coliform Content.				Grade of milk.
		1 c.c.	.1 c.c.	.01 c.c.	.001 c.c.	
1	5,480	—	—	—	—	....
2	5,160	—	—	—	—	....
3	5,640	—	—	—	—	....
4	584,000	+	+	+	+	....
5	5,920	—	—	—	—	....
6	4,240	—	—	—	—	" A "
7	1,120	—	—	—	—	....
8	6,000	—	—	—	—	....
9	7,200	—	—	—	—	....
10	3,460	—	—	—	—	....
11	11,600	—	—	—	—	....
12*	1,672,000	+	+	+	—	....
13	125,600	+	+	—	—	....
14†	108,800	+	+	+	—	" A "
15	4,020	+	+	—	—	....
16	36,600	—	—	—	—	....
17	4,660	—	—	—	—	....
18†	476,000	—	—	—	—	" A "
19*	11,800	+	+	—	—	....
20	5,240	+	+	+	+	" A "
21	1,088,000	—	—	—	—	" A "
22	1,580	+	—	—	—	" A "
23	69,000	—	—	—	—	" Certified "

* † From same producers.

Cowsheds, Dairies, etc.

Five small dairies have been fitted up for the retail milk trade.

Registration of Milk Vendors and Premises.

The number of milk vendors on the register on 31st December, 1936, was as follows :

	<i>“ Loose ” Milk.</i>	<i>Bottled Milk.</i>	<i>Total.</i>
Registered 31st December, 1935	108	110	218
Number registered during 1936	13	18	31
	121	128	249
Removed from Register during 1936	40	5	45
Number on Register December, 1936	81	123	204

Six of these are also registered as wholesale dealers.

Ten are producer retailers whose premises are situate within the Borough, and six producer retailers from outside of the Borough.

During the year 22 registered milk retailers were reported in accordance with the provisions of the Milk and Dairies (Amendment) Act, 1922, Section 2 (2) owing to the unsatisfactory conditions under which milk was stored on their premises. In every case the registration of the retailer was cancelled.

OFFENCES :

Proceedings were taken against two persons for contravening the provisions of Articles 6 (3) and 31 (2) of the Milk and Dairies Order, 1926, viz. :—

1. Carrying on the trade of a dairyman, not being a registered person.
2. Using unregistered premises as a dairy.
3. Removing or tampering with the disc or other device used for closing the bottle before delivery to the consumer.

Both defendants were fined 20 /-.

Milk (Special Designations) Order, 1923 and 1936.

The Milk (Special Designations) Order, 1923, was revoked by the Milk (Special Designations) Order, 1936, which came into operation on the 1st June, 1936.

13 licences were granted to nine dairymen under the Orders :—

	<i>Establish- ment where produced and bottled.</i>	<i>Establish- ment where bottled only.</i>	<i>Establish- ment where sold only.</i>	<i>Establish- ment where Pasteur- ised.</i>	<i>Total.</i>
--	--	--	---	---	---------------

" Certified "					
Milk..	..	..	2	..	2
Grade " A.					
Tuberculin					
tested " ..	..	..	4	..	4
Grade " A."					
(Accredited)	1	4	..	..	5
Pasteurised					
Milk..	..	..	1	1	2
	1	4	7	1	13

Ice Cream.

Under the South Shields Corporation Act, 1935, Section 89 and 90, the Corporation have power to require Ice Cream manufacturers and dealers and their premises to be registered.

The following table gives the number of persons and premises registered during the year :—

	<i>Manufacturers.</i>	<i>Dealers.</i>	<i>Total.</i>
Number of persons registered..	14	21	35
	<i>For</i>	<i>For</i>	
	<i>Manufacture.</i>	<i>Sales.</i>	<i>Total.</i>
Number of premises registered ..	14	37	51

During the year three small factory premises were rebuilt, extended and improved ; and small alterations and improvements were carried out at eight other premises used for the manufacture of ice cream.

Meat Inspection at the Public Abattoir.

There are no private slaughter houses in the borough ; all slaughtering of animals for food must be carried out at the Abattoir.

The following table gives the number of animals slaughtered at the Public Abattoir during the past eight years :—

	1929	1930	1931	1932	1933	1934	1935	1936
Beasts ..	2,019	2,325	2,408	2,503	2,374	2,363	2,499	2,458
Calves ..	332	387	228	108	158	329	320	460
Sheep ..	25,503	25,036	29,219	40,071	35,680	32,395	28,951	28,418
Pigs	5,638	4,886	6,124	8,410	6,958	6,646	6,186	5,827
Totals ..	33,492	32,634	37,979	51,092	45,170	41,733	37,956	37,163

Food Condemned.

The following table shows the amount of food condemned and destroyed during the year :—

AT THE ABATTOIR :—

On account of Tuberculosis :—

	Cows.	Heifers.	Bull- ocks.	Bulls.	Calves.	Pigs.	Total.
Whole Carcase and offal	14	6	..	..	..	11	31
Parts and Organs condemned ..	179	70	30	4	..	211	494
Total animals affected	193	76	30	4	..	222	525

Parts and Organs condemned on account of Tuberculosis :—

	Cows.	Heifers.	Bullocks.	Bulls.	Calves.	Pigs.
Forequarters	7	6	1	..	..	..
Hindquarters	..	..	..	..	..	..
Heads	38	23	12	1	..	111
Lungs	164	52	18	4	..	13
Hearts	6	5	1	1	..	..
Livers	6	3	2	1	..	11
Tripes	10	1	..	..	..	113
Fats and guts	27	2	2	1	..	..
Udders	8	..	..	..	..	..

Total weight of meat and offal condemned on account of Tuberculosis :—

Beef, 16,060 lbs.

Pork, 3,042 lbs.

Food condemned for other diseases and conditions :—

	Septicaemia	Pyæmia	Erysipelas.	Found dead.	Dropsy.	Emaciation	Abscesses	Parasites	Cirrhosis	Inflammation	Cystic	Mastitis	Bruised	Total No.	Weight lbs.
BEASTS :—															
Whole carcase and offal		1												1	399
Hindquarter (part)													1	1	54
Livers							12	1	5					18	252
Lungs								1						1	..
Kidneys											2			2	..
Udders							4					13		17	..
SHEEP :—															
Whole carcase and offal	..	1		8	5									14	767
Hindquarter, etc.							1							1	14
Livers								29						29	58
PIGS :—															
Whole carcase and offal	1		1	7		1				1				11	732
Livers									19	5				24	60
Lungs										10				10	..
Tripes										3				3	..

FOOD CONDEMNED OUTSIDE THE ABATTOIR :—

The under-mentioned foodstuffs were condemned on account of decomposition or unsoundness :—

	lbs.
Beef (chilled)	117
Beef, English	116
Mutton, English	44
Bacon	420
Pigs heads (pickled)	224
Potted meat	30
Cooked hams (2)	34
Jellied veal and ham	18
Chicken (1)	4
Rabbit	2
Tomatoes	4
Apples	45
Total	1,058 lbs.

Total weight of foodstuffs condemned :—

	Tons.	cwts.	qtrs.	lbs.
Beef, mutton, pork, fruit, etc.	10	0	3	12

In addition the following canned foodstuffs were condemned :—

Milk (full cream and skimmed)	1,705	Peaches	144
Cream	27	Beans	72
Corned beef	167	Peas	108
Luncheon meat	13	Apricots	23
Boiled beef	1	Plums	11
Tongue	115	Cherries	59
Jellied veal	8	Fruit salad	51
Jellied pork	33	Raspberries	7
Pressed pork	1	Loganberries	8
Salmon	193	Strawberries	25
Sardines, brisling & sild	85	Apples	1
Lobster	2	Pears	625
Crab	11	Pineapples	336
Crayfish	4	Tomatoes	440
Meat paste (various)	56	Oranges	102
Fish paste (various)	15	Grape fruit	50
		Cooked dinner	1

Food Premises.

The following is a summary of visits paid by the Food Inspector to the various premises under his supervision. Visits are also made by the Sanitary and Shops Inspectors.

	No. of premises at end of year.	No. of Visits.
† Butchers' and pork butchers' shops	140	183
Wholesale meat shops	5	158
Fish shops	20	21
Fried fish shops	69	8
** Dairies and milk shops	204	376
Cowsheds	10	93
‡ Ice cream shops	51	114
Bakehouses (factories and workshops)	54	17
* Triperies	3	108
* Gutscraping places	2	98
Market Place (public)	1	141
Slaughterhouse (public)	1	448
§ Piggeries	21	8
Tallow boiling places	1	2
Other visits, sampling, etc.	..	560
	..	2,335

† Excludes stalls in Market Place (average 5).

** Includes premises where bottled milk is sold.

‡ Number varies considerably—does not include stalls on beach during the summer.

* Inclusive of one tripe-preparer and two gutscrapers who occupy premises at the Abattoir.

§ Regular visits to piggeries are made by a police officer in the course of his duties under the Diseases of Animals Acts and Orders.

Food and Drugs (Adulteration) Act, 1928.

The total number of samples taken under the Act and sent to the Public Analyst was 225, of which 173 were taken informally and 52 were statutory samples.

The following is a summary of the samples, results of analyses, and action taken :—

MILK :

116 samples were taken, 72 of which were informal.

106 samples were genuine.

10 samples were deficient as under :—

(1)	1.3 per cent. in milk fat.	(6)	44.3 per cent. in milk fat.
(2)	4.0 „ „	(7)	7.3 per cent. in milk fat and 2.1 per cent. in non-fatty solids.
(3)	4.0 „ „	(8)	0.8 per cent. in non-fatty solids.
(4)	4.3 „ „	(9)	2.2 „ „
(5)	19.3 „ „	(10)	3.4 „ „

Eight of these samples were taken informally and two were statutory.

Informal samples, numbers (4), (5), (6), (7), (8), (9), and (10) were followed up by taking statutory samples, all of which were certified to be genuine. In the case of number (2) the vendor gave up the sale of milk.

Statutory sample No. (3) was taken from a one-pint bottle and a further sample taken from the wholesaler was certified to be genuine. The retailer of statutory sample No. (1) was cautioned.

Five of the above-mentioned samples Nos. (5), (6), (8), (9), and (10) were obtained through an agent who was served with either the whole or a portion of the contents of a bottle of milk, opened by the retailers contrary to Article 31(2), Milk and Dairies Order 1926. See report of action taken against retailers.

72 samples were taken at retail shops, 16 at dairies, 14 from street retailers, 7 at producers' premises, and 7 on delivery at dairies.

Seven samples of milk intended for school supplies were taken, all of which were genuine.

DRIED MILK :

Five samples were taken, three of which were in unopened cartons and were obtained at a clinic ; and two from bulk supplies at retail shops. The results of the analyses were as follows :—

	<i>Water.</i>	<i>Ash.</i>	<i>Fat.</i>	<i>Protein.</i>	<i>Milk Sugar.</i>
(1) A. ..	6.20	5.34	27.00	24.98	36.48
(2) D. ..	6.08	5.40	26.60	24.92	37.00
(3) W. ..	6.42	5.56	27.90	25.26	34.86
(4) D. ..	5.90	5.34	28.50	24.34	35.92
(5) D. ..	5.88	5.38	28.70	24.60	35.44

CHEESE :

One statutory sample of cheese (in foil) was taken and was certified to be free from tin.

LARD :

Five informal samples were taken, all of which were reported to be not genuine. Four of these contained respectively 50, 50, 75 and 75 per cent. cotton seed oil, and one was chiefly if not entirely composed of vegetable fats or oils.

SHREDDED SUET :

Four informal samples and one statutory sample were taken. One informal sample contained 20 per cent. of ground rice being 17.6 per cent. in excess of the maximum quantity (17.0 per cent.). This was followed up by taking a statutory sample which proved to be genuine.

GROUND ALMONDS SUBSTITUTE :

Five informal samples of ground almonds were obtained and sent for analysis. The Public Analyst in his remarks says (1) "Have not the slightest flavour of ground almonds," (2) and (3) "Have not the slightest suggestion of the presence of even a trace of ground almonds or of almond flavouring ; they consist of ground sweet nut of some kind," (4) and (5) "are essentially ground peanut."

"In order that the public may not be deceived in purchasing these substitutes as "ground almonds," the word *substitute* should be prominently displayed, and in the same size type, at least, as the words ground almonds."

GROUND ALMONDS :

Nine samples of ground almonds were taken. Eight were genuine. The Analyst reported that one non-genuine sample contained no almonds but was ground hazel or barcelona nut.

CUSTARD POWDER, BLANCMANGE AND CORNFLOUR :

Four informal samples of custard powder contained respectively 0, 25, 65, and 90 parts of sulphur dioxide per million.

One informal sample of blancmange powder contained 35 parts of sulphur dioxide per million.

Three informal samples of cornflour contained respectively 40, 45, and 65 parts of sulphur dioxide per million.

MIXED DRIED FRUITS.:

One informal sample was taken and was found to contain 70 parts of sulphur dioxide per million.

RAISINS, MUSCATELS, SULTANAS AND CURRANTS :

Ten informal samples were taken as follows :—raisins, 3 ; muscatels, 1 ; sultanas, 3 ; currants, 3 ; all of which were certified to be free from preservative.

BISCUIT MEAL :

One informal sample was taken and found to be free from preservative and was coloured with a permitted dye.

SAUSAGE :

Thirteen samples were taken, twelve of which were informal. Three were free from preservative and the remainder contained respectively 20, 20, 50, 60, 100, 240, 340, 340, 390, and 510 parts of sulphur dioxide per million.

Seven butchers were cautioned for failing to exhibit a notice relating to preservatives contained in sausage sold by them. One butcher was cautioned in respect of the excessive amount of preservative.

VINEGAR :

Four samples were taken ; of these three were informal. One informal sample was found to be deficient in acetic acid by 1 per cent. and this was followed by taking a statutory sample which was certified to be genuine.

42 samples of the following substances were also taken, all of which were genuine :—

Condensed milk, 1 ; butter, 9 ; margarine, 3 ; lard compound, 6 ; tea, 2 ; coffee, 2 ; chicory and coffee, 1 ; cocoa, 1 ; rice, 3 ; ground rice, 3 ; semolina, 1 ; tapioca, 3 ; flour, 3 ; self-raising flour, 1 ; mustard, 1 ; white pepper, 1 ; bismuthed magnesia, 1.

ARTIFICIAL CREAM ACT, 1929.

No samples were taken.

FERTILISERS AND FEEDING STUFFS ACT, 1926.

Four informal samples of fertilisers were taken and sent for analysis by the Agricultural Analyst.

The composition of one sample agreed with the statutory statement.

The composition of two samples were, taking into account the limit of variation, slightly in excess of the permissible quantities.

The figures of one sample for all the fertilising constituents were considerably higher than those guaranteed by the statement.

MERCHANDISE MARKS ACT, 1926.

A number of traders were cautioned regarding infringements of the Orders relating to meal and fruit and meat.

AGRICULTURAL PRODUCE (GRADING AND MARKING) ACTS, 1928 and 1931.

Several instances of using fruit and egg cases for similar ungraded articles were noted and the tradesmen were cautioned regarding the removal of the national mark label before using the cases for such purposes.

DISEASES OF ANIMALS ACTS, 1894 TO 1927.

MOVEMENT OF ANIMALS RECORDS ORDER, 1925.

One person was fined 20/- for failing to keep a record of the movement of animals.

NOTIFIABLE DISEASES.

There were no alterations during 1936 in the list of diseases compulsorily notifiable under the Notification Acts and Regulations.

Prevalence.

Scarlet fever was more prevalent in 1936 than in any year since 1924. During the year 659 cases of scarlet fever were notified. There was a decrease in the number of cases of diphtheria and pneumonia both primary and influenzal.

One case of food poisoning was notified, it proved to be a case of gastro enteritis of some weeks duration, with a vague history of having eaten unsuitable food.

There were no cases of smallpox, continued fever, relapsing fever, cholera, plague, polio-myelitis, cerebro-spinal fever or typhus fever reported during the year.

The following table shows the number of cases of acute infectious diseases notified during each of the past eleven years :—

Disease.	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
Smallpox	392	960	890	281	7	..	5	..	..	..	..
Chickenpox	791	586	1394	653	670	..	..	..	..	..	..
Scarlet fever	130	216	174	164	116	124	57	119	496	481	659
Diphtheria	47	73	51	62	45	19	26	24	45	98	82
Enteric fever	10	7	2	..	1	..	..	..	2	1	1
Continued fever	1	..	1	..	..	..	..	..	..	..	..
Dysentery	1	..	1	1	..	..	..	2	..	..	1
Malaria	3	2	2	2	..	3	4	1	3	2	2
Cerebro-spinal fever	1	..	..	..	1	31	16	6	1	..	..
Polio-myelitis	3	1	3	2	..	..	1	..	3	1	..
Polio-encephalitis	..	..	1	..	..	1	..	1	..	..	1
Encephalitis lethargica ..	6	6	4	..	2	1	2	3	1	2	2
Pneumonia : primary ..	380	617	590	586	345	532	479	426	406	346	271
Pneumonia : influenzal ..	34	79	33	78	10	30	25	23	16	18	14
Puerperal fever	7	4	5	11	5	1	3	2	6	4	8
Puerperal pyrexia	1	6	8	7	11	8	13	11	7	10	7
Erysipelas	30	31	47	55	57	41	41	58	83	61	59
Ophthalmia neonatorum	23	20	14	14	14	7	6	10	7	10	6

The age-incidence of the cases notified during 1936, the number which occurred in each ward of the town, the number removed to hospital, and the deaths from each disease will be found in table 9, page 81.

The attack-rate per 1,000 population for certain infectious diseases for England and Wales as compared with South Shields is as under :—

	<i>England and Wales.</i>	<i>South Shields.</i>
Smallpox	0.00	..
Scarlet fever	2.53	5.92
Diphtheria	1.39	0.74
Enteric fever	0.06	0.01
Erysipelas	0.40	0.53
Pneumonia	1.11	2.56

If stated as a rate per 1,000 total births the case rate for puerperal fever and puerperal pyrexia is as under :—

	<i>England and Wales.</i>	<i>South Shields.</i>
Puerperal fever	3.27	4.10
Puerperal pyrexia	9.64	3.59

Seasonal Incidence.

The following table shows the number of cases notified in each month of the year 1936 :—

DISEASE.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Scarlet fever	94	79	66	47	45	34	44	48	53	69	46	34	659
Diphtheria	5	7	9	7	11	9	5	5	8	4	8	4	82
Enteric fever	1	..	..	..	..	..	..	..	..	..	..	..	1
Encephalitis lethargica ..	..	1	1	..	..	..	..	..	..	..	..	..	2
Polio-encephalitis	..	..	..	..	..	..	1	..	..	..	..	..	1
Primary pneumonia ..	32	32	37	32	20	28	18	19	13	16	15	9	271
Influenzal pneumonia ..	1	2	..	3	3	1	..	..	..	..	1	3	14
Puerperal fever	..	1	2	1	1	..	..	..	..	1	2	..	8
Puerperal pyrexia.....	1	1	..	1	..	1	..	..	..	2	1	..	7
Erysipelas	7	4	5	6	5	1	3	7	6	4	4	7	59
Ophthalmia neonatorum	2	..	..	..	1	1	..	1	..	..	..	1	6
Malaria	..	..	..	..	..	..	..	1	..	1	..	..	2
Dysentery	..	..	..	..	..	..	..	..	..	1	..	..	1
TOTAL	143	127	120	97	86	75	71	81	80	98	77	58	1113

SMALLPOX :

No case of smallpox was notified during the year.

VACCINATION :

During the year ended 30th September, 1936, 472 successful primary vaccinations were performed by the Public Vaccinators, including 447 children under a year old ; and four persons were re-vaccinated.

Of the 1969 births registered in 1935, 619 infants (31.5 per cent.) were successfully vaccinated by the 31st January, 1937. In 1,102 cases (56 per cent.) there was conscientious objection to vaccination on the part of the parents. In four cases vaccination was unsuccessful through insusceptibility ; 113 children died unvaccinated ; in 32 cases vaccination was postponed on medical grounds ; 12 children removed to other districts ; 70 could not be traced and 17 remained unaccounted for in the Vaccination Record Book.

No action before the magistrates was taken in these 17 cases.

The number of conscientious objectors to vaccination has increased year by year since the last outbreak of smallpox in the years 1925-9.

SCARLET FEVER :

659 cases of scarlet fever were notified, including 7 which occurred in institutions among non-residents. There were 7 deaths, one of which was a patient from a neighbouring authority. Six of the deaths occurred in hospital and one at home. 528 of the cases (80 per cent.) were removed to hospital. There were 87 secondary cases in 68 houses and 28 " return cases " or cases occurring in the household within 10 days from the discharge of a patient from hospital. The disease, particularly in the first half of the year, was more severe in type than in previous years ; but towards autumn the cases were mainly of a milder type. The disease was widespread over the borough, but as has been found in former epidemics, Holborn and St. Hilda wards suffered least.

DIPHTHERIA :

82 cases were notified, 74 (or 90 per cent.) were removed to hospital. There were 8 deaths ; 7 in the Deans Hospital and 1 in Harton Hospital. The case mortality was 10 per cent. Most of the fatal cases were admitted in a stage in which there was little hope of recovery. There were seven secondary cases in five households. 625,000 units of antitoxin were supplied to doctors for the treatment of cases or suspected cases at home.

ENTERIC FEVER :

One case was notified. On admission to the hospital the diagnosis proved to be pneumonia and nephritis.

PNEUMONIA :

271 cases of primary pneumonia and 14 of influenzal pneumonia were notified. The attack rate was 2.56 per 1,000 of the population as compared with 1.11 per 1,000 for England and Wales. Six deaths occurred in non-notified cases. The number of deaths from pneumonia, nearly half of which occurred among children under two years old, is as follows :—

	M.	F.	Total.
Broncho-pneumonia	16	15	31
Lobar pneumonia	11	5	16
Pneumonia, not defined	18	13	31
Influenzal pneumonia	3	1	4
	—	—	—
	48	34	82
	==	==	==

84 pneumonia jackets were supplied to patients at the request of doctors attending the cases. 27 cases were admitted to Harton Hospital. The Health Visitors paid 317 visits to 240 cases. 15 cases were referred to the Nursing Association, whose nurses paid 243 visits at the cost of the Council.

ENCEPHALITIS LETHARGICA.:

Two cases, one a boy of nine and one a girl of eleven, were notified ; both were admitted to Harton Hospital and both died.

POLIO ENCEPHALITIS :

One case, a boy of three, was notified. He was admitted to Harton Hospital. The case proved fatal.

DYSENTERY :

One case in a man was notified. He had contracted the disease abroad some years ago. He was admitted to Harton Hospital and recovered.

MALARIA :

Two cases were notified ; both were sailors who had contracted the disease on the West Coast of Africa.

There were two deaths from malaria during the year. One, after an inquest, was certified as having died from malaria contracted as a seagoing engineer. The other was certified as having died from cerebral thrombosis and chronic ague.

OTHER DISEASES :

59 cases of erysipelas, including seven among non-residents in Harton Hospital, were notified. There were two deaths. Eight cases of puerperal fever, seven cases of puerperal pyrexia and six cases of ophthalmia neonatorum were notified. These are referred to in the section of this report which deals with Maternity and Child Welfare.

NON-NOTIFIABLE INFECTIOUS DISEASES.

MEASLES :

Information was received at the Health Department of 866 cases, a smaller number than might have been expected. The Health Visitors paid 915 visits to the homes of the cases. The disease appeared to have been mild in type with fewer complications. There were eight deaths, two in each of the 1st and 2nd quarters of the year and four in the 3rd. The death rate from measles was equal to a rate of 0.07 per 1,000 of the population. No case was referred to the Nursing Association, and no case was admitted to hospital owing to lack of accommodation.

WHOOPING COUGH :

There was an increase in the number of cases of whooping cough in 1936 as compared with the previous year. 413 cases were reported. The Health Visitors paid 445 visits to the homes of the cases. There were only three deaths : one in the 1st quarter and two in the 4th quarter of the year.

CHICKENPOX :

Chickenpox was not so prevalent as in 1935. 506 cases were reported. The Health Visitors paid 518 visits to the homes of the cases.

MUMPS :

The number of cases of mumps reported in 1936 was much greater than in the previous year. The disease was prevalent in the first half of the year. Information was received of 737 cases to whom the Health Visitors paid 749 visits. One death was ascribed to this disease.

ENTERITIS :

23 deaths occurred from enteritis among children under two years of age as compared with 27 deaths in 1935. The death rate was 0.21 per 1,000 of the population or 12.2 per 1,000 births. The comparative figure for England and Wales was 5.9 per 1,000 births, and for the County Boroughs generally, 8.2 per 1,000 births. Of the deaths 14 were boys and 9 girls. Two deaths occurred in the 1st quarter, six in the 2nd, five in the 3rd and ten in the 4th quarter of the year.

Of the 23 deaths, 10 infants were 3 months old or under (two were less than two weeks old), 7 were from 4 to 6 months, 5 were 6 to 9 months and one 9 months old.

12 of the deaths were in houses which will be dealt with under the Housing Act, 1930, 4 were in houses in which the tenants had been transferred from slum areas, 6 in houses which are moderately good but old, and one in a house about 40 years old.

17 of the deaths occurred in the colder months of the year when the average temperature was below 49°F., and 6 occurred in the warmer months when the average temperature was between 55.5°F. and 61.0°F.

In epidemics of former years, *e.g.*, that of 1910, most of the cases occurred in the late summer and early autumn and were in some measure due to the agency of flies. During 1936 in South Shields there was a notable absence of flies, and the average temperatures were not high. Having regard to the type of house in which the cases occurred it is probable that the absence of properly constructed food stores—in many of the houses food is kept in a cupboard in the kitchen near the fireplace—and in many cases the absence of amenities contributed to the high mortality from enteritis.

ISOLATION HOSPITAL.

Accommodation.

There was no change in the hospital accommodation for cases of infectious disease. The hospital was overcrowded over the greater part of the year, but on account of the shorter stay of the patients in hospital the overcrowding was not so marked as in former epidemics. Eight cases of scarlet fever and 21 of diphtheria were admitted to Boldon Infectious Diseases Hospital under the Council's arrangement with the Boldon Urban District Council.

The following table shows the number of cases treated during the year in the Deans Hospital and the Boldon Infectious Diseases Hospital.

Notified Diseases.	Remain- ing in on 31st Dec., 1935.	Ad- mitted during 1936.	Dis- charged.	Died.	Remain- ing in on 31st Dec., 1936.
Scarlet fever	56	528	552	6	26
Enteric fever	..	1	1	..	..
Diphtheria	8	74	72	7	3
Suspected diphtheria	..	6	6	..	..
Total	64	609	631	13	29

The average daily number of cases under treatment in hospital is shown below.

Notified Diseases.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Average.
Scarlet fever	57	56	59	52	38	28	25	33	43	43	30	31	41
Enteric fever	0	1	0	..	..	..	..	..	..	..	..	..	0
Diphtheria..	6	5	4	5	7	7	2	2	5	6	4	4	5
Others	..	..	..	0	0	0	0	..	0	..	..	..	0
Totals ..	63	62	63	57	45	35	27	35	48	49	34	35	46

Scarlet Fever.

528 patients were admitted to hospital, one of which was a case of puerperal scarlet fever. Of those admitted 37 proved to be conditions other than scarlet fever. Three of these were re-diagnosed as measles and three as German measles. The presence of other infections in the wards added considerably to the work of the nursing staff, but in spite of the limited isolation accommodation very few cases of cross infection occurred. There were six deaths : all were of a very severe type on admission, death occurring after 1, 2, 6, 6, 9 and 10 days respectively. The average stay of the patients, excluding the fatal cases, was 28 days.

The maximum number of cases of scarlet fever in the Deans Hospital was 60 in April and the minimum 17 in July.

Diphtheria.

74 patients were admitted to hospital as suffering from diphtheria. Of these 13 were re-diagnosed as cases of tonsillitis and 1 as scarlet fever, while one patient had both scarlet fever and diphtheria. In addition six cases of suspected diphtheria were admitted. Five of these proved to be cases of tonsillitis and one was a diphtheria carrier. After tonsillectomy the throat of the latter patient was free from infection. The average stay of the patients in hospital was 29 days. There were seven fatal cases, death occurring after 5 hours, 1, 4, 4, 4, 5, and 34 days respectively.

Enteric Fever.

One patient was admitted as suffering from enteric fever. The diagnosis proved to be lobar pneumonia and nephritis. He was extremely ill on admission, and the disease was complicated by an empyema. He remained 47 days and recovered.

TABLE 9.—CASES OF, AND DEATHS FROM, NOTIFIABLE INFECTIOUS DISEASE IN SOUTH SHIELDS DURING THE YEAR 1936.

Notifiable Diseases.	No. of Cases notified.													No. of Cases notified in each Ward.																	No. of Deaths.*									
	At following Ages—Years.													At following Ages—Years.																	At following Ages—Years.									
	0-	1-	2-	3-	4-	5-	10-	15-	20-	35-	45-	65-	Shields.	Beacon.	St. Hilda.	Hadrian.	Holborn.	Laygate.	Victoria.	Bents.	Rekendyke.	Westoe.	Deans.	Tyne Dock.	Simonside.	West Park.	Horton.	Added Area.	Institutions.†	No. of Cases admitted to Isolation Hospital.	At all ages.									
Smallpox	54	55	55	54	57	59	221	47	62	47	80	23	40	59	24	68	21	57	76	51	74	75	69	102	140	78	121	33	26	603	108	22								
Diphtheria	54	55	55	54	57	59	221	47	62	47	80	23	40	59	24	68	21	57	76	51	74	75	69	102	140	78	121	33	26	603	108	22								
Erysipelas	54	55	55	54	57	59	221	47	62	47	80	23	40	59	24	68	21	57	76	51	74	75	69	102	140	78	121	33	26	603	108	22								
Scarlet fever	54	55	55	54	57	59	221	47	62	47	80	23	40	59	24	68	21	57	76	51	74	75	69	102	140	78	121	33	26	603	108	22								
Enteric fever	54	55	55	54	57	59	221	47	62	47	80	23	40	59	24	68	21	57	76	51	74	75	69	102	140	78	121	33	26	603	108	22								
Puerperal fever	54	55	55	54	57	59	221	47	62	47	80	23	40	59	24	68	21	57	76	51	74	75	69	102	140	78	121	33	26	603	108	22								
Puerperal pyrexia	54	55	55	54	57	59	221	47	62	47	80	23	40	59	24	68	21	57	76	51	74	75	69	102	140	78	121	33	26	603	108	22								
Encephalitis lethargica	54	55	55	54	57	59	221	47	62	47	80	23	40	59	24	68	21	57	76	51	74	75	69	102	140	78	121	33	26	603	108	22								
Pneumonia : primary	54	55	55	54	57	59	221	47	62	47	80	23	40	59	24	68	21	57	76	51	74	75	69	102	140	78	121	33	26	603	108	22								
Do. influenzal	54	55	55	54	57	59	221	47	62	47	80	23	40	59	24	68	21	57	76	51	74	75	69	102	140	78	121	33	26	603	108	22								
Ophthalmia neonatorum	54	55	55	54	57	59	221	47	62	47	80	23	40	59	24	68	21	57	76	51	74	75	69	102	140	78	121	33	26	603	108	22								
Malaria	54	55	55	54	57	59	221	47	62	47	80	23	40	59	24	68	21	57	76	51	74	75	69	102	140	78	121	33	26	603	108	22								
Polio-encephalitis	54	55	55	54	57	59	221	47	62	47	80	23	40	59	24	68	21	57	76	51	74	75	69	102	140	78	121	33	26	603	108	22								
Dysentery	54	55	55	54	57	59	221	47	62	47	80	23	40	59	24	68	21	57	76	51	74	75	69	102	140	78	121	33	26	603	108	22								
Food Poisoning	54	55	55	54	57	59	221	47	62	47	80	23	40	59	24	68	21	57	76	51	74	75	69	102	140	78	121	33	26	603	108	22								
Tuberculosis	54	55	55	54	57	59	221	47	62	47	80	23	40	59	24	68	21	57	76	51	74	75	69	102	140	78	121	33	26	603	108	22								
Total	1114	54	55	55	54	57	59	221	47	62	47	80	23	40	59	24	68	21	57	76	51	74	75	69	102	140	78	121	33	26	603	108	22							

* Including inward transferable deaths and cases not previously notified, but excluding outward transfers.

† Non-residents of the Borough and permanent inmates of Institutions. Other cases admitted to the Institutions have been distributed in the wards according to their previous home address in the Borough.

† Reference to notification of tuberculosis is made on page 92.

MUNICIPAL LABORATORIES.

The following table shows in detail the work carried out in the laboratories during the year :

Nature of Examination.

Sputum for tubercle bacilli	1,426
Swabs for diphtheria bacilli	875
Blood and exudates.....	123
Urine and faeces for organisms.....	71
Pus for organisms	54
Water from Public Baths	7
Milk for tubercle bacilli, etc.....	33
Cerebro-spinal fluid	22

In addition to the preparation of media, vaccines, stains and reagents carried out in the laboratories, certain examinations cognate to the work were made at the Venereal Diseases clinic, and specimens were sent from the clinic to the College of Medicine, Newcastle, for examination. The details are shown on page 112.

CANCER.

During 1936, there were 181 deaths from cancer as compared with 143 in 1935, giving a crude death rate of 1.63 per 1,000 of the population.

The distribution of the disease is shewn in the following table :—

	<i>Males.</i>	<i>Females.</i>
Buccal cavity	6	1
Pharynx, stomach, liver, etc.	36	31
Intestines, peritoneum, etc.	12	15
Female genital organs	..	26
Breast	..	16
Prostate gland and bladder	9	..
Skin	8	1
Lung	4	..
Pancreas	3	2
Other	9	2
	—	—
	87	94
	==	==

During the last 35 years, the number of deaths from cancer has steadily increased, as is shewn in the following table of five year periods, comparing the death rate in South Shields with that of England and Wales, and shewing the percentage death rate of South Shields to that of England and Wales :

<i>Period.</i>	<i>South Shields.</i>	<i>England and Wales.</i>	<i>South Shields rate per cent. of England and Wales.</i>
1901- 5	0.67	0.87	78
1906-10	0.77	0.94	81
1911-15	0.87	1.05	82
1916-20	0.93	1.18	79
1921-25	1.00	1.27	79
1926-30	1.18	1.41	83
1931-35	1.30	1.53	85

It will be seen that during the period under review the deaths attributed to cancer in South Shields have been doubled, while in England and Wales they have almost doubled, and that the death rate for South Shields is gradually approximating to that of the country generally. Part of the increase is no doubt due to a better understanding of the disease and consequently a greater accuracy in diagnosis and partly due to the ageing of the population, but it does appear that, in making allowance for these causes, the incidence of the disease is increasing.

Strictly comparable figures are not available, but to further indicate the increase in the disease, Table A has been prepared, giving the deaths due to cancer as a percentage of the total deaths from all causes in each age-group during the years 1921 to 1935. It not only shows the increase in the number of deaths but the very high proportion in the age-group 45-65 among females, where for England and Wales as a whole one death in every four was certified as due to cancer.

With regard to the organs affected or the sites in which the disease occurs, Table B compares the percentage of the deaths from cancer in South Shields with that of England and Wales. While the figures are not strictly comparable on account of some difference in classification, the tendency towards the general increase in the incidence of the disease is obvious.

Table C shows the increased use which is being made of hospitals for the treatment of the disease. It will be seen that in 1914, 17.3 per cent. of the total deaths from cancer occurred in hospitals and that this figure gradually increased until in 1936, 35.4 per cent. occurred in hospital. The table does not, of course, include all cases who sought hospital treatment, as these figures are not available. It only deals with those cases who died in hospitals.

The distribution of cancer deaths in the different wards of the Borough has been investigated over a period of 29 years, that is from 1907, about the time that the present wards were formed. Since then there has not been any alteration in the ward boundaries, except for the formation of Harton Ward in 1922, consequent on the extension of the Borough, and a minor adjustment at Simonside Ward at the same time involving Harton Institution.

The wards have, throughout that period, retained their general social characteristics, except that since 1932 there has been migration from Holborn and Shields Wards to Tyne Dock and Simonside Wards, and that Harton Ward, apart from the village of Harton, has received an influx of population from all parts of the town, due to the Council's housing schemes and general building development by private enterprise of semi-detached villa residences.

The analysis shows that the distribution of cancer varies from 4.6 per cent. of the total deaths in Holborn Ward to 9.8 per cent. in Westoe Ward and 10 per cent. in Harton Ward. This is, no doubt, due to the variation in the age constitution of the population of the respective wards in association with the higher or lower infant mortality. Table D gives this comparison for each ward, namely, the percentage of deaths from cancer to the total deaths at all

ages, the percentage of deaths under one year of age to the total deaths, and the infant mortality rate. In general, the Table shows that the wards in which the housing conditions are less satisfactory have fewer deaths from cancer and a higher infant mortality rate.

FACILITIES AVAILABLE FOR THE DIAGNOSIS AND TREATMENT OF CANCER :

(a) Provision by the Local Authority. At Harton Hospital the services of a consultant surgeon and consultant physician, together with a modern X-Ray installation and 10.2 milligrammes of radium distributed in 10 tubes are available. Seven patients received radium treatment during 1936.

(b) Provided by voluntary hospitals. At the Ingham Infirmary (180 beds), the services of a consulting staff and an X-Ray installation are available. At the Royal Victoria Infirmary, Newcastle, there are a staff of consultants, X-Ray apparatus, and a Radium Institute in charge of a Radium Officer, where 13 patients from South Shields received radium treatment during 1936.

No definite arrangements exist between the Local Authority and voluntary bodies for the treatment of cancer, and at the moment there are no arrangements for co-ordination between the various forms of provision.

No propaganda on the subject was undertaken during the year.

TABLE A.

Percentage of Deaths due to Cancer of the total deaths from all causes in each age-group: 1921 to 1935.

AGE GROUP.	MALES.						FEMALES.					
	South Shields.			England and Wales.			South Shields.			England and Wales.		
	1921-25	1926-30	1931-35	1921-25	1926-30	1931-35	1921-25	1926-30	1931-35	1921-25	1926-30	1931-35
0—1.....	..	..	..	0.03	0.04	0.06	..	0.2	..	0.04	0.06	0.07
1—5.....	..	0.5	..	0.3	0.4	0.6	..	..	0.4	0.3	0.4	0.5
5—15.....	..	0.5	1.1	0.9	0.9	1.2	..	0.4	..	0.6	0.9	1.0
15—25.....	..	1.1	0.8	1.5	1.6	1.6	1.3	0.8	1.5	1.2	1.4	1.5
25—45.....	3.8	4.0	4.0	4.9	5.3	6.2	10.1	11.4	6.8	10.4	11.2	11.6
45—65.....	17.1	16.6	17.5	17.2	17.2	17.9	20.3	23.2	24.2	23.9	24.1	25.0
65—75.....	13.5	14.5	15.1	15.5	16.7	17.8	10.5	15.3	15.5	16.5	17.2	17.5
75+	5.0	5.8	7.4	7.9	8.9	9.5	4.9	5.5	6.7	8.1	9.0	9.2
Total ..	6.7	7.5	8.7	9.3	10.6	11.8	7.5	9.9	10.6	11.6	12.8	13.7

TABLE C.

CANCER.—DEATHS IN HOSPITAL.

	Total Deaths from Cancer.	Deaths in Hospital.			Hospital Per Cent. of Total.
		South Shields Hospitals.	Other Hospitals.	Total.	
1914 ..	93	15	1	16	17.3
1915 ..	117	19	3	22	18.8
1916 ..	101	15	1	16	15.8
1917 ..	104	26	2	28	26.9
1918 ..	96	20	3	23	23.9
1919 ..	96	8	1	9	9.4
1920 ..	105	15	6	21	20.0
1921 ..	127	25	6	31	24.4
1922 ..	119	27	3	30	25.2
1923 ..	126	28	7	35	27.8
1924 ..	124	19	9	28	22.6
1925 ..	123	18	7	25	20.3
1926 ..	123	31	9	40	32.5
1927 ..	128	32	8	40	31.3
1928 ..	144	44	8	52	36.1
1929 ..	156	39	14	53	33.9
1930 ..	158	40	8	48	30.4
1931 ..	139	30	8	38	27.2
1932 ..	148	41	2	43	29.1
1933 ..	165	43	5	48	29.1
1934 ..	142	40	7	47	33.1
1935 ..	143	43	3	46	32.2
1936 ..	181	58	6	64	35.4

TABLE D.

CANCER DEATHS IN WARDS OF THE TOWN.

Ward.	Cancer Deaths Per Cent. of Total Deaths.	Infant Deaths Per Cent. of Total Deaths.	Infant Mortality Rates.
Shields	5.5	20.9	146
Beacon	7.3	16.9	96
St. Hilda	6.3	18.6	127
Hadrian	7.5	15.3	106
Holborn	4.6	20.3	146
Laygate	5.1	22.2	135
Victoria	6.1	21.6	114
Bents	8.7	12.2	86
Rekendyke	6.0	20.3	118
Westoe	9.8	12.8	78
Deans	5.9	20.8	104
Tyne Dock	5.7	20.6	117
Simonside	6.6	19.5	113
West Park	7.8	14.6	87
Harton	10.0	11.5	65
Unknown	4.7	..	..
	6.5	18.5	112

TUBERCULOSIS.

There were no changes in the personnel of the Tuberculosis Clinic during the year.

After several meetings of the representatives of the constituent authorities the building plans for the Poole Sanatorium were in course of preparation at the end of the year. The constituent authorities are the County Boroughs of Sunderland, Middlesbrough, Gateshead, South Shields, Darlington, and West Hartlepool. There will be accommodation for 317 beds, 60 of which have been allocated to South Shields.

No action was taken under the Public Health (Prevention of Tuberculosis) Regulations, 1925, in relation to persons engaged in the milk trade, or under Section 96 of the South Shields Corporation Act, 1935, regarding the handling of foodstuffs by persons suffering from pulmonary tuberculosis.

It was also not found necessary to apply to the Court for the compulsory removal under the Public Health Act, 1925, Section 62, of any tuberculous patient living under bad conditions.

Special Housing Scheme.

During the year the Housing Committee agreed to increase the allotment to the Health Committee of houses for tuberculous patients living under over-crowded conditions, from 50 to 52 ; but only 50 were actually available and occupied at the end of the year.

Two new cases from houses reserved for tuberculous persons were notified during 1936 ; one, age 11, abdominal, and one, age 4, pulmonary ; but the latter was taken off the register early in 1937 as " wrong diagnosis." In both instances the tenancies had lasted three years.

There were five deaths from pulmonary tuberculosis, after 2, $2\frac{1}{2}$, 3, $3\frac{1}{4}$, and $3\frac{1}{2}$ years tenancies respectively.

There were six changes of tenancies—two after deaths and four for other reasons (left district or removed to other parts of the town) : tenancies of 3, 20, 27, 32, 36 and 38 months respectively.

Incidence of Tuberculosis.

Number of South Shields residents on tuberculosis notification register on 1st January, 1936	975
Cases notified during 1936	276
Non-notified fatal cases	21
Posthumous notifications	4
Inward transfers	..
*Cases re-admitted to register (returned from other districts, etc.)	21
Cases removed from register during 1936	306

* including 8 previously taken off as " free from tuberculosis."

Total number of South Shields residents on register on 31st December, 1936 :—

	<i>Males.</i>	<i>Females.</i>	<i>Total.</i>
Pulmonary	304	233	537
Non-pulmonary	232	222	454
Total	536	455	991

The reasons for removal from the register were :—

Died from tuberculosis or other disease	132
Left the town	52
Two years untraced	7
Three years free (non-pulmonary)	63
Five years free (pulmonary)	23
Wrong diagnosis or withdrawal of notification	29

The following table shows the incidence of tuberculosis in the different wards of the Borough during 1936.

<i>Ward.</i>	<i>No. of Cases.</i>	<i>Ward.</i>	<i>No. of Cases.</i>
Shields	10	Westoe	9
Beacon	13	Deans	28
St. Hilda	16	Tyne Dock	24
Hadrian	14	Simonside	31
Holborn	14	West Park	25
Laygate	24	Harton	26
Victoria	24	Address unknown	2
Bents	20		
Rekendyke	21	Total	301

Notification.

There was an increase in the number of cases of tuberculosis notified in 1936, as compared with 1935.

The following new cases were notified : the figures for 1935 are also given :

	1936.	1935.
Pulmonary—		
Males	110	65
Females.....	82	90
Non-pulmonary—		
Males	53	48
Females.....	31	50

This represents an increase of 23.

In addition, there were 4 cases in respect of which no notification was received until after the death of the patient, and 21 cases were not notified. Of the 25 un-notified cases 12 were pulmonary tuberculosis, 8 tuberculous meningitis, 3 abdominal, one spinal, and one renal tuberculosis. Included in the un-notified cases were three Arabs : two pulmonary and one non-pulmonary. The total increase in the number of cases ascertained during 1936, notified and unnotified, was 24 over those ascertained in 1935. The un-notified cases represent 21 per cent. of the total deaths from tuberculosis, as compared with 15 per cent. on 1935 and 19 per cent. in 1934.

Explanations were asked for from doctors in those cases where there appeared to have been neglect in notifying.

Of the cases of non-pulmonary tuberculosis (notified and other) there were :

	<i>Males.</i>	<i>Females.</i>	<i>Total.</i>
Neck glands	22	17	39
Bowels, mesentery, etc.	10	3	13
Meninges	8	5	13
Bones and joints	15	7	22
Lupus, etc.	7	3	10
Total	<u>62</u>	<u>35</u>	<u>97</u>

Of the 107 notified cases of tuberculosis who died during the year :—9 died within one week of notification ; 15 died within one week to one month of notification ; 14 died within one month to three months of notification ; 10 died within three months to six months of notification ; 8 died within six months to twelve months of notification.

It is to be regretted that so many cases are notified so late in the disease as there is very little opportunity of doing anything for such cases and efforts to limit the spread of the disease are carried on at a great disadvantage.

The following table shows the number of “ new cases ” of tuberculosis during 1936, classified according to sex and age groups :

Age-Group.	New Cases.				Deaths.			
	Respiratory.		Non-Respiratory.		Respiratory.		Non-Respiratory.	
	M.	F.	M.	F.	M.	F.	M.	F.
Under 1 year ..	..	..	2	1	..	..	1	1
1— 5 years	2	4	8	10	..	..	2	3
5—10 years	8	4	15	3	1	..	3	..
10—15 years	6	10	12	10	1	3	1	..
15—20 years	14	16	8	2	5	6	2	1
20—25 years	13	11	3	1	3	7	3	..
25—35 years	21	20	10	5	16	9	4	1
35—45 years	22	8	4	1	10	3	..	1
45—55 years	19	8	..	1	17	4	1	1
55—65 years	7	7	..	1	7	..	..	..
Over 65 years ..	3	1	..	..	2	1	1	..
Total	115	89	62	35	62	33	18	8

The term “ new cases ” includes all the primary notifications (276) and the 25 fatal cases referred to above who had not been notified before death.

The new cases also include 15 cases (5 per cent. of the total) in Arabs :—

		<i>Pulmonary.</i>		<i>Non-Pulmonary.</i>	
		M.	F.	M.	F.
1— 5 years	....	1	..	..	..
5—10 years	....	..	1	..	..
15—20 years	....	..	1	..	..
25—35 years	....	2	..	2	..
35—45 years	..	3	1	2	..
45—55 years	....	2	..	..	..

The total number of cases of tuberculosis notified or ascertained during each of the past ten years is as follows. The table also gives the approximate attack-rate per 1,000 of the population and the number of cases per 100 deaths from tuberculosis :—

	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
Notified :—										
Pulmonary	273	278	270	268	225	211	232	237	155	192
Non-pulmonary ..	111	184	140	153	172	148	106	111	98	84
Not notified :—										
Pulmonary	11	28	30	17	18	15	23	15	8	12
Non-pulmonary ..	10	13	9	9	14	18	23	22	16	13
Total	405	503	449	447	429	392	384	385	277	301
Attack-rate	3.28	4.13	3.76	3.84	3.76	3.46	3.37	3.41	2.47	2.70
Cases per 100 deaths	211	194	193	230	220	180	183	195	172	249

Mortality.

During the year there were 121 deaths from tuberculosis. Of these 95 were due to tuberculosis of the lungs and 26 to tuberculosis of other organs. This represents a death rate of 1.08 per 1,000 of the population; compared with 1.43 per 1,000 in 1935, and is the lowest death rate from tuberculosis ever recorded in the borough. Ten of the deaths occurred among Arabs, all males (8 pulmonary and 2 non-pulmonary) or 8 per cent. of the total deaths from the disease, as under :—

	<i>Pulmonary.</i>	<i>Non-pulmonary.</i>
25—34 years	2	2
35—44 years	2	..
45 and over	4	..
	—	—
	8	2
	==	==

The death rate in South Shields from tuberculosis during the past ten years is as follows :—

	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
Pulmonary	1.13	1.63	1.41	1.25	1.24	1.46	1.39	1.28	1.06	0.85
Non-pulmonary	.43	.50	.45	.41	.46	.46	.45	.47	.37	.23

The death rate from tuberculosis in England and Wales during 1936 was 0.69 per 1,000 of the population (pulmonary 0.58, non-pulmonary 0.11).

Treatment of Tuberculosis.

The following is a detailed statement on the treatment of tuberculous patients during 1936 :—

RESIDENTIAL INSTITUTIONAL TREATMENT.—During the year 316 tuberculous patients or suspected cases were known to have been admitted to institutions for treatment. Of these 162 were treated at the cost of the Health Committee (apart from those admitted to poor law hospitals) as follows :—

At Cleadon Park Sanatorium (all pulmonary)	92
At the Ingham Infirmary (surgical cases)	56
At other sanatoria	14

The accommodation at Cleadon Park Sanatorium was, on the average throughout the year 97 per cent. occupied, an average of 20 men, 21 women and 3 children ; all pulmonary cases.

139 patients suffering from tuberculosis were admitted to Harton Hospital during the year. Of these 109 were maintained at the cost of the Health Committee (average 32 beds) ; the remainder were admitted from the Borough as Poor Law cases.

In addition, an average of 29 beds (16 pulmonary and 13 non-pulmonary) were used throughout the year at the cost of the Health Committee at the Ingham Infirmary and at Stannington, Stanhope, Wolsingham, and other sanatoria. Thus, the total beds occupied per day, apart from Poor Law cases, was 105.

The waiting list for the year averaged 2 adults and 2 children, including an average of 2 surgical cases.

While the ideal would be to have no waiting list, an average waiting list of only four must be considered very satisfactory, particularly as in most cases the time of waiting is very short.

The following table shows the distribution and classification of South Shields patients admitted to institutions during 1936, and includes those treated at the expense of the Corporation :—

	Pul-monary.			Non-pulmonary.			Observa-tion.			Total.
	M.	W.	C.	M.	W.	C.	M.	W.	C.	
Approved Sanatoria, etc.—										
Cleadon Park	42	44	5	..	..	..	..	1	..	92
Stannington	..	..	2	..	..	4	..	..	..	6
Stanhope	3	..	1	..	..	..	..	..	..	4
Wolsingham	..	..	4	..	..	..	..	..	..	4
Ingham Infirmary..	4	2	..	16	6	41	..	..	..	69
Other Sanatoria	..	1	..	..	..	..	..	..	..	1
Harton Hospital	59	40	14	10	6	7	..	..	3	139
Other Hospitals	..	..	..	..	..	1	..	..	..	1
Total	108	87	26	26	12	53	..	1	3	316

The total number of individual patients referred to in the above statement is 298. The difference in the total figures is due to the transfer of certain patients from sanatoria to hospitals or *vice versa*, and occasionally a patient is re-admitted.

TREATMENT IN SANATORIA.

88 cases were discharged from Cleadon Park Sanatorium during the year ; the average length of stay was 200 days. Two patients were discharged from Stanhope Sanatorium after an average stay of 572 days. Five were discharged from Stannington Sanatorium after an average stay of 449 days. Two cases were discharged from Wolsingham Sanatorium after an average stay of 311 days. 55 cases of non-pulmonary tuberculosis were discharged from the Ingham Infirmary after an average stay of 60 days.

The immediate results of treatment of patients discharged from approved sanatoria and hospitals are set out in table G. page 106.

It will be seen that of the 89 cases of pulmonary tuberculosis discharged from sanatoria who stayed 28 days or more, in 34 the disease was quiescent. Of the 16 non-pulmonary cases discharged, in 7 the disease was quiescent.

AFTER CARE.

The South Shields branch of the National Council for Social Service undertook the after care of tuberculous patients, many of whom were in necessitous circumstances, and supplied a number of patients with beds and bed clothing.

During the year members of the Health Committee attended meetings of the North Eastern Association of Care Committees.

TUBERCULOSIS CLINIC.

The work of the tuberculosis clinic during the year is set out in detail on pages 100 and 110. 817 new patients, of whom 401 were contacts, were examined. Of the contacts 54, or 13 per cent. were found to be tuberculous. Of the new cases and contacts examined, 231 were sent by private doctors, 497 (mostly contacts) attended at the request of the Tuberculosis Medical Officer, 73 were sent by other medical officers, 12 came on their own initiative, and four from other sources.

84 names were removed from the register as having recovered. The Health Visitors paid 4,225 visits to the homes of tuberculous patients during the year. Surgical appliances, *e.g.*, splints, jackets, etc., were supplied to 20 patients, 283 surgical dressings were applied to 37 patients at the clinic, and 2,588 surgical dressings were supplied for the home treatment of 91 patients. 68 patients were given extra nourishment under the Council's scheme, 20 were recommended to the Public Assistance Committee and 20 to the Unemployment Assistance Board.

The following is Dr. McMath's report for the year on Cleadon Park Sanatorium and the Tuberculosis Clinic :—

“ Patients in the sanatorium at the end of December

1935	41
Admitted during year 1936	92
Discharged during year 1936.....	88
In sanatorium at end of December, 1936.....	45
Average period of stay in the sanatorium was	200 days
Number of beds over period	45

Classification of patients admitted during 1936 :

Observation.	T.B. Minus.	T.B. Plus.		
		Group I.	Group II.	Group III.
1	20	5	27	39

Condition of patients on discharge :—

	T.B. Minus.	T.B. Plus.		
		Group I.	Group II.	Group III.
Quiescent	7	7	3	..
Improved	4	1	24	21
No material improvement ..	4	..	1	14
Died	..	..	..	1

The observation case was discharged as being non-tuberculous.

During the year, 14 successful artificial pneumothoraces were induced, while six others attempted were considered unsuccessful. As well as these, one A.P. case was re-admitted from South Shields and another case was transferred from another area.

209 refills were given to these intern patients during the year, and 379 refills were given to out-patients.

Seven patients had gold therapy, the preparation used being Crisalbine. The usual routine sanatorium treatment of rest, fresh air, a nourishing and plentiful diet, and graduated exercise was continued. On discharge, the patients were all advised to carry out at home, as far as possible, the precautions they had learned in the sanatorium, and to keep in constant touch with the tuberculosis clinic.

A large number of the patients admitted to the sanatorium were found to be suffering from dental caries. In this respect we very much feel the need of a dental surgeon, as patients with dental sepsis and caries cannot derive the utmost benefit from their treatment. As well as the aid of a dental surgeon being required, there is also needed the services of a thoracic surgeon, or arrangements for the further surgical treatment of cases on which artificial pneumothorax has failed, either completely or in part. A great many patients would derive very substantial benefit from surgical treatment, as nowadays there is a definite and successful field for this work in the hands of skilled surgeons.

I would very much like to draw the attention of the Committee to these points and hope that they may be given careful consideration.

In conclusion, I would like to thank the Matron and her staff for their help and loyal support, in looking after the patients' comfort and well-being during their treatment.

As regards the clinic : during the year 1936 every effort was made to get as many contact cases as possible to attend the clinic for examination. Altogether, 746 cases were invited to attend. Of these, 400 cases attended and were examined, but 346 cases either definitely refused or did not attend ; in many cases the request was made on two or three occasions. These 346 cases were contacts of 101 cases of active tuberculosis (32 with T.B. positive sputum). I have taken these figures from the year's work in an effort to show the response given by people actually living in contact with tuberculosis, and who have had the circumstances, etc., explained to them. The majority of cases are agreeable, but a very large proportion will not bother to attend.

During the year we found that of all cases notified as tuberculous, 14.25 per cent. of them were either living or had lived in contact with an active case of tuberculosis.

Now that a new Municipal Clinic is being built, it is to be hoped that an X-ray apparatus may be installed, and so make the clinic complete. Working in the present clinic, a very definite need of an X-ray equipment is felt. Frequently patients find it very difficult getting time off to attend the General Hospital for X-ray, as they have already obtained leave of absence to attend the clinic. In addition, patients are required to pay a third visit to the clinic. So that altogether a patient has to wait and go from place to place before a diagnosis can be definitely made.

As well as these people having to get special leave of absence to attend for X-ray, there are those who are not very strong, and in consequence are often upset by these journeys and by having to wait in none too comfortable surroundings; so that the installation of an X-ray machine would both facilitate the work and be of great convenience to the patients."

ULTRA VIOLET RAY TREATMENT.

103 patients, including 32 new cases, made 3,074 attendances at Harton Hospital during the year.

TREATMENT OF TUBERCULOSIS.

(A.) Return showing the work of the Dispensary during the year 1936.

DIAGNOSIS.	PULMONARY.				NON-PULMONARY.				TOTAL.				GRAND TOTAL	
	Adults.		Children.		Adults.		Children.		Adults.		Children.			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
A.—NEW CASES examined during the year (excluding contacts) :— (a) Definitely tuberculous (b) Diagnosis not completed (c) Non-tuberculous	54	44	12	11	15	10	23	13	69	54	35	24	182	416
	..	..	..	..	..	..	..	..	..	..	..	..	..	234
	..	..	..	..	..	..	..	..	80	56	50	48	..	..
B.—CONTACTS examined during the year : (a) Definitely tuberculous (b) Diagnosis not completed (c) Non-tuberculous	21	17	2	7	..	..	5	2	21	17	7	9	54	401
	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	..	..	..	..	..	..	..	..	57	96	94	100	347	..
C.—CASES written off the Dispensary Register as :— (a) Recovered (b) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensary Register as tuberculous)	5	5	7	5	5	7	24	26	10	12	31	31	84	..
	..	..	..	..	..	..	..	..	155	172	178	182	687	..
D.—NUMBER OF CASES on Dispensary Register on December 31st :— (a) Definitely tuberculous (b) Diagnosis not completed	149	143	81	53	65	68	151	114	214	211	232	167	824	..
	..	..	..	..	..	..	..	..	..	..	..	..	..	..

TREATMENT OF TUBERCULOSIS.—Continued.

1. Number of cases on Dispensary Register on January 1st	865	2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years	63
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of"	74	4. Cases written off during the year as Dead (all causes)	76
5. Number of attendances at the Dispensary (including Contacts)	10,577	6. Number of Insured Persons under Domiciliary Treatment on the 31st December	124
7. Number of consultations with medical practitioners:— (a) Personal	6	8. Number of visits by Tuberculosis Officers to homes (including personal consultations)	38
(b) Other	337	10. Number of :— (a) Specimens of sputum, etc., examined	890
9. Number of visits by Nurses or Health Visitors to homes for Dispensary purposes	2,658	(b) X-ray examinations made	1,574
11. Number of "Recovered" cases restored to Dispensary Register, and included in A(a) and A(b) above	9	in connexion with Dispensary work	
		12. Number of "T.B. plus" cases on Dispensary Register on December 31st	256
(B.) Number of Dispensaries for the treatment of Tuberculosis (excluding centres used only for special forms of treatment) Provided by the Council..... One. Provided by Voluntary Bodies Nil.			

TREATMENT OF TUBERCULOSIS—(CONTINUED).

(C.) Number of beds available for the treatment of Tuberculosis on the 31st Dec., in Institutions belonging to the Council.

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NAME OF INSTITUTION.	FOR PULMONARY CASES.		FOR NON-PULMONARY CASES.		TOTAL.
	Adults.	Children under 15.	Adults.	Children under 15.	
Cleadon Park Sanatorium	35	10	..	..	45
Harton Public Assistance Institution.....	65	14	General	Wards.	79

TREATMENT OF TUBERCULOSIS—(CONTINUED).

(D.) Return showing the extent of Residential Treatment and Observation during the year in Institutions (other than Poor Law Institutions) approved for the treatment of Tuberculosis.

	In Institu- tions on Jan. 1st.	Admitted during the year.	Discharged during the year.	Died in the Institu- tions.	In Institu- tions on Dec. 31st.
Number of doubtfully tuberculous cases admitted for observation.	Adult males ..	..	1	..	..
	Adult females..	1	1	..	..
	Children	..	..	..	..
	Total	1	2	..	..
Number of patients suffering from pulmonary tuberculosis	Adult males ..	46	40	1	25
	Adult females	45	40	..	28
	Children	11	13	..	8
	Total	102	93	1	61
Number of patients suffering from non-pulmonary tuberculosis	Adult males ..	16	15	..	1
	Adult females..	4	5	..	..
	Children	39	40	..	12
	Total ..	59	60	..	13
GRAND TOTAL	68	162	155	1	74

TREATMENT OF TUBERCULOSIS—(CONTINUED).

(E.) Return showing the extent of Residential Treatment provided during the year in Poor Law Institutions for persons chargeable to the Council.

	In Institu- tions on Jan. 1st.	Admitted during the year.	Discharged during the year.	Died in the Institu- tions.	In Institu- tions on Dec. 31st.
Number of patients suffering from pulmonary tuberculosis	Adult males ..	57	29	26	20
	Adult females..	32	26	6	6
	Children	17	14	2	6
	Total	106	69	34	32
Number of patients suffering from non-pulmonary tuberculosis	Adult males ..	5	2	5	5
	Adult females..	3	3	..	1
	Children	6	7	6	1
	Total	14	12	11	7
GRAND TOTAL	45	120	81	45	39

TREATMENT OF TUBERCULOSIS—(CONTINUED).

(G.) Return showing the immediate results of treatment of definitely tuberculous patients discharged during the year from Institutions (other than Poor Law Institutions) approved for the treatment of Tuberculosis.

Classification on admission to the Institution.	Condition at time of discharge.	Duration of Residential Treatment in the Institution.												Grand Totals.
		Under 3 months.*			3—6 months.			6—12 months.			More than 12 months.			Totals.
		M.	W.	Ch.	M.	W.	Ch.	M.	W.	Ch.	M.	W.	Ch.	
PULMONARY TUBERCULOSIS	Class T.B. minus.	1	2	..	4	2	3	1	..	2	..	4	6	16
	Quiescent	..	2	..	1	..	..	..	2	..	..	4	2	7
	Not quiescent	1	..	..	..	..	..	..	..	..	..	..	..	1
	Died in Institution	..	..	..	..	..	..	..	..	..	1	..	1	2
PULMONARY TUBERCULOSIS	Class T.B. plus Group I.	..	..	..	..	..	..	..	1	..	..	1	..	1
	Quiescent	..	..	..	..	..	..	..	..	..	..	..	..	..
	Not quiescent	..	..	..	..	..	..	..	..	..	..	..	..	..
	Died in Institution	..	..	..	..	..	..	..	..	..	..	..	..	..
PULMONARY TUBERCULOSIS	Class T.B. plus Group II.	1	..	..	4	1	..	4	3	1	1	5	1	16
	Quiescent	3	2	..	2	7	1	9	9	1	2	20	3	39
	Not quiescent	..	..	..	..	..	..	..	..	..	..	..	..	..
	Died in Institution	..	..	..	..	..	..	..	..	..	..	..	..	..
PULMONARY TUBERCULOSIS	Class T.B. plus Group III.	..	..	..	..	..	..	..	..	..	..	..	..	..
	Quiescent	..	..	..	..	..	..	..	..	..	..	..	..	..
	Not quiescent	2	1	..	..	1	..	..	2	..	1	5	..	7
	Died in Institution	..	..	..	..	..	..	..	..	..	..	..	..	..
TOTALS.....	PULMONARY	8	7	..	11	11	4	14	17	4	4	39	13	89

* Patients whose stay in residential institutions did not exceed 28 days are not included.

TREATMENT OF TUBERCULOSIS—CONTINUED.

(G). Return showing the immediate results of treatment of definitely tuberculous patients discharged during the year from Institutions (other than Poor Law Institutions) approved for the treatment of Tuberculosis.

Classification on admission to the Institution.	Condition at time of discharge.	Duration of Residential Treatment in the Institution.												Grand Totals.
		Under 3 months.*			3—6 months.			6—12 months.			More than 12 months.			Totals.
		M.	W.	Ch.	M.	W.	Ch.	M.	W.	Ch.	M.	W.	Ch.	
Non-PULMONARY TUBERCULOSIS.	Bones and Joints.	..	..	..	..	..	1	..	..	..	..	..	..	3
		1	..	1	..	..	2	..	..	1	..	..	..	9
		..	..	..	..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	..	..	..	..	..	..	..
Non-PULMONARY TUBERCULOSIS.	Abdominal.	..	..	..	..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	..	..	..	..	..	..	..
Non-PULMONARY TUBERCULOSIS.	Other Organs.	..	..	..	..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	..	..	..	..	..	..	..
Non-PULMONARY TUBERCULOSIS.	Peripheral glands.	..	..	1	..	..	..	..	1	2	..	..	..	4
		..	..	..	..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	..	..	..	..	..	..	..
TOTALS..	NON-PULMONARY	1	..	2	1	..	3	..	1	3	..	1	13	16

* See note on page 106.

VENEREAL DISEASES.

There were no changes in the personnel of the Venereal Diseases treatment centre during 1936.

While the incidence of syphilis among residents appears to be declining there has been a gradual increase in the number of cases of gonorrhoea during the past 15 years ; in fact, there were more cases among residents in 1936 than in any year since 1920.

The ratio of male to female new cases of gonorrhoea, was roughly 6 to 1. While this ratio for females is less than that of the country generally (4 to 1) it compares favourably with that of other British seaports. The attendance ratio generally of male to female cases was 4.8 to 1.

There has always been some difficulty in persuading female patients to attend but the attendance ratio in South Shields of male to female cases of 4.3 to 1 suggests that once a woman is persuaded to attend she attends well.

The total number of attendances at the clinic was higher during 1936 than in any year since its inception except the year 1926.

The voluntary system has been on trial since 1916, and from a study of the local statistics, it does not appear that venereal disease has declined to the extent one would have reasonably expected, while in the case of gonorrhoea there has been an increase. It would appear that the time has arrived when some form of compulsion with, of course, adequate safeguards and consideration for the patient's interests, should be applied, not only in the case of new infections but towards those who, being in an infectious state, discontinue treatment before they are cured.

The consequences of untreated or partly treated venereal disease are so grave, not only to the individual but to the community, that sooner or later sterner measures will be necessary to bring this particular group of diseases under control. Education, propaganda and enlightened public opinion will, no doubt, assist, but there are those who are not reached by propaganda, or if they are, it has no effect on them. Unfortunately, these are the people who to a very large extent are responsible for the spread of the disease.

The following tabulated statements show in detail the work of the clinic for the year.

COMPARATIVE STATEMENT OF NEW CASES TREATED AT THE
MUNICIPAL V.D. CLINIC DURING THE PAST 11 YEARS.

	1926	1927	1928	1929	1930	* 1931	1932	1933	1934	1935	1936
Syphilis :											
Residents	137	67	98	52	83	60	87	70	70	97	85
Non-residents ..	129	95	77	83	66	54	41	45	42	47	43
Soft chancre :											
Residents	21	10	4	13	13	14	10	10	11	6	13
Non-residents ..	10	15	4	18	30	10	6	10	9	4	7
Gonorrhoea :											
Residents	119	106	178	129	197	196	200	160	169	213	215
Non-residents ..	194	143	112	139	99	87	67	61	53	68	61
Total venereal cases:											
Residents	277	183	280	194	293	270	297	240	250	316	313
Non-residents ..	333	253	193	240	195	151	114	116	104	119	111
Non-venereal cases :											
Residents	198	162	181	167	170	179	220	182	217	171	226
Non-residents ..	78	82	89	112	108	70	63	43	61	70	43
Grand Total ..	886	680	743	713	766	670	694	581	632	676	693

* approximate : see note in Annual Report for 1931.

COMPARATIVE STATEMENT OF ATTENDANCES DURING LAST
11 YEARS.

Year.	Residents.	Non-residents.	Total.	Male.	Female.
1926	34,089	9,484	43,573	35,862	7,711
1927	13,096	3,901	16,997	12,837	4,160
1928	12,156	2,845	15,001	11,084	3,917
1929	10,860	3,097	13,957	10,393	3,564
1930	16,284	4,053	20,337	14,854	5,483
1931	17,778	2,799	20,577	16,644	3,933
1932	20,830	1,462	22,292	18,182	4,110
1933	17,821	1,317	19,138	15,115	4,023
1934	18,523	1,233	19,756	15,050	4,706
1935	18,990	2,834	21,824	16,771	5,053
1936	19,823	2,772	22,595	17,694	4,901

Table (a) summarises the new cases attending during 1936, and Table (b) is an analysis of the attendances.

(a) CASES TREATED AT SOUTH SHIELDS CLINIC DURING 1936.

	NEW CASES.		NEW CASES FROM OTHER CENTRES.		TOTAL CASES *	
	Male.	Female.	Male.	Female.	Male.	Female.
Syphilis	50	19	59	..	250	73
Soft chancre ..	17	..	3	..	24	..
Gonorrhoea	214	36	24	2	306	59
Non-venereal diseases ..	225	43	1	..	299	43
Total	506	98	87	2	879	175

* Includes those in attendance from the previous year.

Of the new cases who attended for the first time, South Shields residents numbered 488 ; (syphilis, 55, soft chancre, 10, gonorrhoea, 198, non-venereal diseases, 225).

(b) TOTAL ATTENDANCES AT THE CLINIC DURING 1936.

	Males.		Females.		Total.		Average Attendance per patient.	
	M.O.	Others.	M.O.	Others.	M.O.	Others.	Male.	Female.
Syphilis	4,079	..	1,766	..	5,845	..	16.3	24.2
Soft chancre	66	..	..	..	66	..	2.8	..
Gonorrhoea	1,918	11,149	708	2,318	2,626	13,467	42.7	51.3
Non-vener'l diseases ..	482	..	109	..	591	..	1.6	2.5
Total	6,545	11,149	2,583	2,318	9,128	13,467	20.1	28.0

Non-residents made 2,772 attendances at the clinic during 1936, as follows :—

From 6 Counties in England and Wales (including Durham County, 1,681)	1,696
„ 8 County Boroughs (including County Borough of Tynemouth 412).....	481
„ Scotland	388
„ Northern Ireland.....	2
„ 3 Colonies, Dominions, etc.	19
„ 15 foreign countries ...	186

Table (c) indicates the disposal of cases during the year.

(c) DISPOSAL OF CASES.

	Syphilis.		Soft Chancre.		Gonorrhoea.	
	M.	F.	M.	F.	M.	F.
Ceased attendance :						
(a) Before completion of treatment	60	21	5	..	60	20
(b) After completion of treatment, but before final tests of cure	..	..	3	..	9	3
Transferred to other centres or to institutions or to private practitioners	57	6	6	..	29	7
Discharged after completion of treatment and final tests of cure	12	9	4	..	131	11
Under treatment 31st Dec., 1936	121	37	6	..	77	18

In-Patient Treatment.

It was not found necessary to admit any patients to the wards during the year.

Arsenobenzene Compounds.

2,979 doses of these approved compounds were administered to patients at the clinic. In addition 120 doses were supplied to 4 medical practitioners.

Pathological Examinations.

482 examinations of pathological material were made at the clinic.

The following table shows the number of specimens from South Shields residents examined at the College of Medicine. The figures include specimens sent by other clinics and hospitals and those sent by 11 private practitioners, 7 of whom were South Shields doctors.

Source of Material.	Nature of Examination.		
	Wassermann Re-actions.	Microscopical.	General C.S.F. Exam.
South Shields V.D. Clinic	877	..	8
Newcastle V.D. Clinic	24	..	..
Tynemouth V.D. Clinic	8	..	..
Harton Hospital, South Shields	37	..	..
Ingham Infirmary, South Shields	36	..	1
Deans Hospital, South Shields ..	1	..	..
Royal Victoria Infirmary, Newcastle	19	..	..
Private Practitioners	35	12	..
Total	1,037*	12	9

* Exclusive of 14 C.S. Wassermann tests.

In addition, three gonococcal fixation tests were made for private practitioners in Newcastle.

South Shields Cases treated at other Centres.

The following table shows the number of South Shields residents treated at other centres during 1936.

	Newcastle.	Tynemouth.	Sunderland.	Hull.	Seamen's Hospital. Greenwich.	Liverpool.	Bristol.	Total.
(a) Number of cases dealt with during the year for the first time* and found to be suffering from :—								
Syphilis	5	..	1	..	..	2	..	8
Soft chancre	..	..	..	1	..	..	..	1
Gonorrhoea	4	3	3	4	5	3	2	24
Non-venereal diseases ..	5	2	..	..	10	1	..	18
(b) Total attendances at out-patient clinic	244	203	60	15	98	146	2	768
(c) Aggregate number of " In-patient Days "	..	..	..	..	89	..	..	89

* Exclusive of those known to have received treatment for the same infection at other Centres.

MATERNITY AND CHILD WELFARE.

Notification of Births.

The number of births reported to the Health Department during 1936 was 1,912, as follows :—

(a) Notified under the Notification of Births Acts :

By midwives	1,319
By doctors	200
By relatives and others	76
	1,595

(b) Reported by local Registrars (not previously notified)

317

 1,912

Approximately 83 per cent. of the total live births were notified. This total (1,912) is exclusive of 89 stillbirths, 58 of which were notified by midwives, 10 by doctors, 2 by relatives, and 19 which had not been previously notified and were reported by the Registrars. The proportion of stillbirths to live births was 4.7 per cent. as compared with 4.2 per cent. in 1935, 4.4 per cent. in 1934, 4.9 per cent. in 1933, 3.8 per cent. in 1932, and 3.8 per cent. in 1931.

Infant Mortality.

There were 163 deaths among infants under one year, or an infant mortality rate of 87 per 1,000 births. The corresponding rate for 1935 was 80 per 1,000.

Of the 163 deaths, 102 occurred among boys and 61 among girls, an infant mortality rate of 104 and 68 per 1,000 births respectively.

Neo-natal deaths, or deaths occurring in the first month of life, numbered 89, *i.e.*, 47 per 1,000 births.

Deaths among illegitimate children numbered 8 out of 70 illegitimate births, or a rate of 114 per 1,000 as compared with a rate of 86 among legitimate children.

The mortality rate among infants in each quarter was :

1st quarter	.....	109	per 1,000 births.
2nd	„	87	„
3rd	„	73	„
4th	„	74	„

The principal causes of death in infants were :

Ante-natal	{	Prematurity	52
		Debility	4
		Malformations, atelectasis, birth injuries, etc.	20
			—
			76
			==
Post-natal	{	Pneumonia	22
		Bronchitis	17
		Convulsions	14
		Measles	1
		Whooping cough	1
		Gastro-intestinal disorders	24
		Tuberculosis	2
		Other causes	6
			—
			87
			==

Children Aged 1 to 5 Years.

The Maternity and Child Welfare Committee considered Circular 1550 from the Ministry of Health, dated the 20th May, 1936. In the Circular the Minister urges that more attention should be given to the supervision of children between the ages of 1 and 5 years. In reporting on the subject it was pointed out that about 13 per cent. of children entering school at the age of 5 suffer from some defect, and that to supervise children between the ages of 1 and 5 years would necessitate the appointment of an additional medical officer and health visitors, and the provision of additional clinic accommodation.

The following table summarises the work of the clinic since 1930.

Year.	1930	1931	1932	1933	1934	1935	1936
(1) Number of Births	2,396	2,362	2,168	1,963	2,013	1,930	1,878
(2) CLINICS :							
No. of Children who attended at the clinic for the <i>first time</i> during the year :							
(a) children under 1 year	1,676	1,152	1,205	1,159	1,162	1,181	1,747
(b) children 1-5 years old ..		551	531	692	620	753	1,421
Total	1,676	1,703	1,736	1,851	1,782	1,934	3,168
(3) Total no. of attendances made :							
(a) by children under 1 year	14,772	12,188	13,064	13,382	14,402	16,260	16,300
(b) by children 1-5 years old		4,568	6,411	8,718	8,042	8,815	9,512
Total attendances	14,772	16,756	19,475	22,100	22,444	25,075	25,812
(4) HOME VISITS :							
No. of <i>visits</i> by Health Visitors to homes of :							
(a) children under 1 year	9,325	9,628	9,909	9,322	8,545	7,466	8,946
(b) children 1-5 years old	455	1,915	4,803	4,827	7,200	7,598	11,474
*Total visits	9,780	11,543	14,712	14,149	15,745	15,064	20,420

*Other than visits for special purposes, *e.g.*, on the occurrence of measles, whooping cough, chickenpox, tuberculosis, etc., in children under 5 years of age.

CLINIC ATTENDANCES :

It will be observed that while there has been a decided decrease in the number of births in the past five years, the number of infants under one year of age who attend the clinic has not lessened ; in fact, the proportion is much greater, now amounting to 93 per cent. of the births in the year. Increasing use is also being made of the clinics for children age 1 year and under 5 years. In the year 1931, children age 1—5 years made 4,568 attendances ; in 1936 the number

was 9,512. The attendances made by infants has increased very considerably from approximately 12,000 in 1930 to over 16,000 in 1936. The total attendances at the clinic of children under 5 years of age has increased by nearly 75 per cent. in five years. These increases of attendances have necessitated increase in the number of clinic sessions.

HOME VISITS :

Similarly with regard to the supervision of the health of the children at home, the number of visits paid by the health visitors has increased from less than 10,000 to over 20,000 in the past six years. Much more striking is the increase in the visits paid to children in the age group 1—5 years. In 1930 only 455 such visits were made ; in successive years since then the numbers were 1,915 visits, 4,803, 4,827, 7,200, 7,598 and 11,474. This has been achieved by a combination of circumstances : (1) there has been an increase in the number of health visitors on the staff ; (2) the decrease in the number of births has allowed of more of the health visitors' time being available for the older children ; (3) certain clinics which were formerly attended by health visitors have now been moved elsewhere and the health visitors have been freed for other work, *e.g.*, tonsils and adenoids operations are now dealt with at Harton Hospital instead of at the special clinic formerly held at Wesley Street ; ultra-violet ray clinics are now held at the hospital and not on the clinic premises ; (4) the appointment of a woman clerk for clerical work at the Child Welfare Clinics has also contributed to release health visitors for their specialised duties.

MORTALITY RATES :

In the five years period 1901—1905 the average infant mortality rate was 148 per 1,000 births ; in the 5 years 1931—1935 the rate decreased to 89 per 1,000. There has been a similarly marked reduction in the deaths of children between the ages of 1 and 5 years. In the period 1901—1905 the average death rate in the 1—5 age group was 29 per 1,000 of the population of that age ; in 1931—1935 the average death rate was 12. There can be no doubt that the Council by providing clinics, systematic health visiting and food, have very materially helped in the reduction of the death rate among children. While the improvement in the health of the children can be measured to some extent by the reduced death rates, there must have been an all-round improvement in their health which cannot be estimated by figures. The care already given to the mothers before the birth, and to children under one year is reflected in an improvement in the health of older children. Similarly, if more care is bestowed on the children of 1—5 years, a reduction in the morbidity and mortality rates of those of school age is to be expected.

STAFF :

Apart from clerical assistance, the Maternity and Child Welfare staff consists of one woman medical officer, and nine health visitors, each of whom is responsible for a particular district of the town, consisting of one or more wards. Each district health visitor is also a school nurse for her district, and a tuberculosis visitor, so that there is definite co-ordination, and she is kept well acquainted with the children in her district from birth till the end of school life and later. The health visitors also attend pre-natal and child welfare clinics, general school clinics, dental clinics, etc. There is also close co-operation between the Maternity and Child Welfare Medical Officer and the School Medical Officer, the Tuberculosis Officer and the V.D. Medical Officer, which co-operation is greatly facilitated by the whole of the services being under one department and under one administrative Medical Officer. In addition to the nine district health visitors there are two school nurses whose time is entirely devoted to the school medical service and one health visitor entirely engaged at the tuberculosis clinic.

From the facts given in the report referred to above it will be seen that it would be impossible to carry out the requirements of the Ministry without an augmented staff, and when the new clinic premises are ready for occupation the question will again be submitted to the Committee for their consideration.

Maternal Mortality.

During 1936 there were only 6 deaths among mothers as a result of pregnancy. For every 313 live births (or 325 total births) one mother lost her life. In 1935 the figure was one in 193 ; in 1934 one in 300 ; in 1933, one in 187 ; in 1932 one in 225. The average for the last five years was one in 238 total births. The maternal death rate during 1936 was 3.07 per 1,000 total births as compared with 3.65 per 1,000 for England and Wales.

The causes of death were as follows :—

Sepsis	5
Abortion	1

All the patients were removed to hospital for treatment.

Age at death :

20—25 years	1
25—30 „	2
30—35 „	1
35—40 „	2

In addition there were 5 other deaths associated with pregnancy or confinement :

Lobar pneumonia	1
Puerperal scarlet fever	1
Fatty degeneration of heart, chronic bronchitis, pregnancy....	1
Acute yellow atrophy of liver	1
Chronic nephritis and abortion.....	1

They were all treated in hospital.

Included in these 11 deaths, three were associated with abortion or miscarriage—(1) abortion, (2) post-abortive sepsis, (3) chronic nephritis and abortion.

Eleven reports on maternal deaths were sent to the Ministry of Health during the year ; and the medical officers of health of five other areas were notified of maternal deaths occurring in South Shields hospitals.

Inspection of Midwives.

During 1936, 29 midwives notified their intention to practise, including four who lived in the administrative County of Durham, but excluding 22 practising in Harton Hospital. All are trained women.

873 (or 44 per cent.) of the total births were attended by midwives, apart from 227 cases in which the midwife acted as maternity nurse, and exclusive of confinements in hospitals.

14 midwives had 10 cases or less each (4 had none).

4 ,, 11 to 25 cases each.

2 ,, 26 to 50 cases each.

8 ,, 51 to 100 cases each.

1 midwife had 111 cases.

These figures include still-births and abortions.

There were notified to the Central Midwives Board 15 changes of address. Three temporary suspensions were also reported, the midwives concerned having been in contact with cases of infectious disease.

All the midwives practising in the borough were circularised (1) on the use of drugs, and (2) regarding alterations in certain rules of the Board.

During the year the Council paid the midwife's fee in 153 necessitous cases, including 7 abortions, at a cost of £157 6s. 6d.

The following is a report made to me by the Inspector of Midwives, Miss R. Freeman :

“ During the year 95 routine visits of inspection and 23 special visits were paid. On ten occasions midwives were interviewed at the Health Department. Eight visits of inspection were paid to nursing homes.

In compliance with the rules of the Central Midwives Board it was necessary at different periods to temporarily suspend three midwives so that adequate disinfection of person, clothing, and appliances might be carried out. In addition, there were seven occasions when it was necessary as a precautionary measure to carry out the disinfection of clothing only.

Three midwives were interviewed and cautioned by the medical officer of health regarding complaints received at the Health Department.

It was necessary to caution four midwives—two for delay in sending for medical aid for skin eruption (watery blisters), one with regard to the use of a bag which did not in every way comply with the requirements of the Central Midwives Board, and one following a complaint that a patient was not given free choice of doctor.

Maternal deaths necessitated 27 visits during the year.

Eleven visits were paid by me to cases of discharging eyes.

I regret to say it was again necessary to remind the midwives of their obligation to give their patients free choice of doctor.

I am pleased to report that at no time during the year was it necessary for a midwife to appear before the Committee, and there were no penal cases.

The general work of the midwives during the year was such that I am of opinion there has been an improvement in midwifery practice and an advance towards greater efficiency.

There has been an improvement in the records of the pre-natal work, and with the inauguration of the salaried service I am confident that the midwives will be able to devote more time to this very important branch of their work.”

Notification from Midwives.

The following notifications were received at the Health Department during the year from (1) midwives practising in the Borough and (2) midwives in hospital practice :—

	(1)	(2)
Sending for medical help	361	69
(Causes).....	372	69
(Cases)	326	59
Still-birth notifications	22	4
Deaths of infants.....	38	6
Deaths of mothers	..	5
Laying out of dead bodies.....	7	1
Artificial feeding.....	16	11
Infectious cases	23	1
Intention to practise	29	22

The causes for which medical help was called numbered 441 ; of these 372 were abnormalities in the mother, and 69 in the infant.

In the case of mothers the chief causes were :—

	(1)	(2)
Delayed labour, mal-presentations, etc.	110	35
Abortion (or threatened)	22	..
Haemorrhage and placenta praevia.....	21	8
Perineal rupture.....	57	8
Increased pulse or temperature.....	14	6
Albuminuria, fits, oedema, etc.....	12	1
Retained or adherent placenta	9	1
Phlebitis	3	..
Pyelitis, cystitis and mastitis	4	..
Shock, collapse, etc.	5	..
Debility, chill, etc.	9	..
Other conditions.....	17	2
Total	<u>283</u>	<u>61</u>

In the case of the infant the chief causes were :

Feebleness and prematurity	26	5
Inflamed eyes	36	..
Rash	..	2
Still-birth and sudden death.....	5	..
Jaundice	3	..
Malformations	7	..
Fits	5	1
Other conditions	7	..
	—	—
Total	89	8
	==	==

During the year, doctors who had been called in by midwives rendered accounts to the Local Supervising Authority, in 312 cases for fees amounting to £437. The authority decided to recover £109 from 81 cases. The amount actually recovered during the year was £52.

Maternity Homes.

There were only two registered maternity homes in the Borough at the end of the year, the registration of one home having been cancelled at the request of the keeper on account of ill-health. (This midwife died early in 1937). One of these homes receives other medical cases. There were no applications for registration during the year.

There is accommodation for 9 patients at these homes, and in addition there are 17 beds in Harton Hospital (exclusive of isolation and labour beds) and a varying number in the Ingham Infirmary.

The deaths of 2 infants occurred in a registered home during the year ; one (6 hours) from prematurity, and another, aged 14 days, from congenital defects (spina bifida, hydrocephalus).

The Inspector of Midwives paid 8 visits of inspection to the homes.

There was a considerable increase in the number of births reported in hospitals and maternity homes in the Borough during 1936, as follows :—

	Residents.		Non-Residents.	
	Live Births.	Still Births.	Live Births.	Still Births.
Harton Hospital	262	14	42	12
Ingham Infirmary	12	3	..	..
Registered Maternity Homes	17	1	3	..
	—	—	—	—
Total	291	18	45	12

Pre-natal and Infant Welfare Clinics.

There are three pre-natal and five infant welfare centres in the Borough. The premises in which one centre was conducted were found to be unsuitable and were vacated in December. The clinic was re-established in more suitable premises early in 1937. Four pre-natal clinics are held each week in three centres, six clinics for infants at five centres, and two for children between the ages of one and five years at two centres. In addition, Dr. A. S. Hannay, Medical Officer of Harton Hospital, conducts each week two pre-natal and post-natal clinics in a building adjoining the hospital.

The following is a report made by Dr. Blair, Maternity and Child Welfare Medical Officer :—

“ The attendance at the morning clinics was poor, but very good at the evening clinics. The mothers prefer to come at night ; some from the districts served by the morning clinics asked if they might attend in the evening. Most of the mothers pay great attention to the advice given, and are anxious to help in every way. This is especially so in the case of dental caries. The mothers understand now the importance of a mouth free from infection, and in many cases only lack of means prevents them from obtaining treatment. It would be a great boon if dental treatment were given at the clinic.

The general health of the mothers shows no deterioration. Bad cases of varicose veins are not seen so often as formerly.

About one-fifth of the patients were non-pregnant. Gynaecological cases were advised as to treatment. This is especially necessary where there might be some complication at a future confinement.

The infant and toddlers' clinics were all well attended, and here again the mothers take great interest in the welfare of their children. The mothers and children have benefited by the extra nourishment obtainable, and some of the babies are exceedingly fine. More attention is now paid by the parents to early rickets, tonsils and adenoids, and carious teeth. Unfortunately, the teeth of many young children decay very quickly, and it is no uncommon sight to see two year old children with bad teeth. A clinic dentist for these children is urgently needed.”

MUNICIPAL PRE-NATAL CLINICS.

	Stanhope Road.		*Harton Nook.	†Harton Hosp.	Total.
	Mon.	Wed.	Thurs.	Mon. & Wed.	
Number of names <i>brought forward</i> from 1935.....	34	22	12	76	144
Number of <i>new cases</i> 1936 :					
Expectant mothers	253	205	29	} 267	849
Non-pregnant	50	42	3		
Number of <i>subsequent attendances</i> , 1936.....	608	549	231	2,155	3,543
<i>Total attendances</i> , 1936.....	945	818	275	2,498	4,536
Number of <i>sessions held</i>	49	50	47	100	246

* Last session held 3-12-36. Clinic re-opened early in 1937.

† Including pre-natal clinic held by the Medical Superintendent.

INFANT WELFARE CLINICS.

The following table is a detailed summary of the attendances :

	Stan- hope Road.	Tyne Dock.	Queen Street	H'ton Nook.	Bold'n Lane.	Total 1936.	Total 1935.
No. of children who attended at the clinics for the <i>first time</i> during the year :							
Children under one year of age	630	316	360	188	253	1,747	1,181
Children 1-5 years of age	509	248	321	137	206	1,421	753
Total No. of attendances made :							
By children under 1 year	5,503	2,896	3,125	2,366	2,410	16,300	16,260
By children 1-5 years ..	2,479	2,546	2,346	1,058	1,083	9,512	8,815
By nursing mothers	100	207	109	43	91	550	816
Average attendance per session :							
*Afternoon sessions ..	81	72	72	70	..	75	79
*Morning sessions ..	..	33	33	..	67	44	46

* Babies and children only.

Home Visiting and Clinic Sessions.

The following table summarises the visits of the Health Visitors in relation to the Council's Maternity and Child Welfare Scheme. Visits in connection with tuberculosis, the school medical service, and regarding non-notifiable infectious diseases are referred to in the respective sections of this report, or in my annual report as School Medical Officer.

No. of visits paid :	first visits (after notification of birth)...	1,912
„	„ subsequent visits : infants under 1 year	7,034
„	„ „ children 1—5 years	11,474
„	children breast fed (at first visit).....	about 93 per cent.
„	visits <i>re</i> still births	68
„	„ <i>re</i> infant deaths	110
„	„ <i>re</i> cases of puerperal fever	..
„	„ to expectant mothers : first visits	591
	„ subsequent visits	150
„	„ <i>re</i> applications for free milk	1,349
„	„ midwifery necessitous and emergency cases	379
Other visits		197

The Health Visitors attended the under-mentioned clinic sessions :—

Infant and child welfare clinics	774 sessions .
Pre-natal clinics	298 „

apart from attendances at the tuberculosis dispensary and school clinics and venereal diseases clinics.

Puerperal Fever and Pyrexia.

Eight cases of puerperal fever and seven of puerperal pyrexia were notified during 1936, a case rate of 7.7 per 1,000 total births, as compared with a case rate of 12.9 for England and Wales and 13.0 for the County Boroughs generally.

One case of “ fever ” and two of pyrexia were non-residents.

All the cases of puerperal fever and four of the puerperal pyrexia cases were treated in hospital. One pyrexia case was attended at home by a nurse from the South Shields and District Nursing Association, at the cost of the Maternity and Child Welfare Committee.

Seven of the fever cases, including one non-resident, and seven of the pyrexia, including two non-residents, were actually confined at home.

Four of the fever cases and three of the pyrexias died.

Ophthalmia Neonatorum.

Six cases of ophthalmia neonatorum were notified during 1936. In addition, 36 other cases of "discharging eyes" were reported by midwives, but these were not subsequently notified as ophthalmia. In no case was there any impairment of vision. Two cases of ophthalmia were attended at home by one of the Nursing Association's nurses; one was subsequently admitted to hospital.

Home Nursing.

Two cases of ophthalmia neonatorum and one case of puerperal pyrexia were referred to the Nursing Association at the cost of the local authority.

Infant Life Protection.

There are three names of infants on the register. None were added during the year; the names of three were removed, one having been legally adopted, and in two other cases the father assumed responsibility for the custody of the children. The Health Visitors, who have been appointed Infant Life Protection Visitors, paid 26 visits to the homes of the children during the year.

Convalescent Home.

Only five children under the age of five years were admitted to the home during the year. The average number of child welfare cases in the home daily was four. In all, 1,417 in-patient days were spent in the home by these children.

Ultra Violet Ray Treatment.

44 cases, including 34 new cases, made 737 attendances at Harton Hospital for treatment by the ultra violet rays. All, with the exception of one mother who made 85 attendance, were children under five years of age. The majority of the cases were suffering from rickets. In addition, a number of children suffering from non-pulmonary tuberculosis were sent for treatment by the Tuberculosis Medical Officer.

Assisted Milk Scheme.

1,219 applications for milk, including 583 from expectant mothers, were granted during the year. 259 were re-applications, the former applications having lapsed or having been cancelled.

The quantities of milk distributed were as follows :—

Dried milk given free or at a price below cost ..42,178 lbs.

Fresh ,, ,, ,, ,, .. 70 gallons.

Dried milk sold at price slightly above cost 16,874 lbs.

The cost of the assisted milk scheme for the year 1936 was £1,676.

The amount of dried milk distributed averaged 830 lbs. a week at the beginning of 1936. There was a slight steady rise to 910 lbs. at the middle of March, and then followed an almost continuously steady decrease to 710 lbs. a week at the end of the year.

The usual procedure was carried out regarding applications for free milk, such applications being referred to a Sub-Committee appointed for the purpose ; income statements were verified by reference to employers and co-operation maintained with the Public Assistance Department and other public bodies.

One infringement by an applicant of the conditions governing the scheme was reported to the Maternity and Child Welfare Committee, but it did not warrant further proceedings.

In addition to the free milk provided under the Authority's scheme, supplies of milk and other foods for expectant mothers were received from the National Birthday Trust Fund. 2,234 lbs. of dried milk, and the same number of 8oz. tins of Ovaltine and 4oz. cartons of Marmite, were distributed from this Fund between May and December.

Birth Control.

In July, following a request from the National Birth Control Association to establish a local clinic where instruction could be given in regard to birth control in suitable cases, the Town Council decided not to accede to the request, but the medical officer was authorised to send suitable cases to a clinic at Newcastle, and to pay any expenses in connection therewith.

**TABLE 10.—DEATHS DURING 1936 OF INFANTS UNDER ONE YEAR:
CAUSES AND AGES.**

CAUSES OF DEATH.	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 4 Weeks.	1-3 Months.	3-6 Months.	6-9 Months.	9-12 Months.	Total Deaths under 1 Year.
All Causes : Certified	55	16	6	4	81	20	21	20	10	152
Uncertified	8	..	..	..	8	..	..	2	1	11
Smallpox	..	..	..	..	..	..	..	..	..	..
Chickenpox	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	1	..	..	..	1
Scarlet fever.....	..	..	..	..	..	..	..	..	..	..
Whooping cough.....	..	..	..	..	..	..	1	..	..	1
Diphtheria and croup.....	..	..	..	..	..	..	..	..	..	..
Erysipelas.....	..	..	..	..	..	..	..	..	..	..
Tuberculous meningitis.....	..	..	..	..	..	..	..	1	..	1
Abdominal tuberculosis.....	..	..	..	..	..	1	..	..	..	1
Other tuberculous diseases.....	..	..	..	..	..	..	..	..	..	..
Meningitis (<i>not tuberculous</i>) ..	..	..	..	..	..	..	..	..	..	..
Convulsions	4	5	..	2	11	2	..	1	..	14
Laryngitis.....	..	..	..	..	..	..	..	..	..	..
Bronchitis.....	..	1	..	..	1	2	3	6	5	17
Pneumonia (all forms)	..	..	..	..	..	3	6	8	5	22
Diarrhoea	..	..	1	..	1	..	1	..	..	2
Enteritis	..	2	1	..	3	6	6	5	1	21
Gastritis	..	..	..	..	..	1	..	..	..	1
Syphilis	..	..	..	..	..	1	..	..	..	1
Rickets	..	..	..	..	..	..	..	..	..	..
Suffocation, overlying	..	..	..	..	..	..	..	..	..	..
Injury at birth.....	2	..	..	..	2	..	..	..	..	2
Atelectasis	4	..	..	..	4	..	..	..	..	4
Congenital malformations.....	7	2	2	1	12	..	..	..	..	12
Premature birth	42	3	2	1	48	3	1	..	..	52
Atrophy, debility & marasmus	3	1	..	..	4	..	..	..	..	4
Other causes.....	1	2	..	..	3	..	3	1	..	7
Total.....	63	16	6	4	89	20	21	22	11	163

Net Births in the year :—

Legitimate 1,808

Illegitimate 70

Net Deaths in the year :—

Legitimate Infants .. 155

Illegitimate Infants .. 8

TABLE 11.—DEATHS DURING 1936 OF INFANTS UNDER ONE YEAR :
CAUSES AND WARD DISTRIBUTION.

CAUSES OF DEATH.	WARDS.															To
	Shields.	Beacon.	St. Hilda.	Hadrian.	Holborn.	Laygate.	Victoria.	Bents.	Rekendyke.	Westoe.	Deans.	Tyne Dock.	Simonside.	West Park.	Harton.	
ALL CAUSES—																
Certified	7	6	9	12	3	11	12	5	12	5	7	22	23	10	8	1
Uncertified .....	.....	1	1	1	.....	.....	.....	.....	1	1	.....	3	2	.....	1	
Smallpox .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chickenpox .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Measles .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Scarlet fever .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Whooping cough .....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Diphtheria and croup .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Erysipelas.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tuberculous meningitis .....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....
Abdominal tuberculosis .....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
Other tuberculous diseases .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Meningitis (not tuberculous) .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Convulsions	1	.....	.....	1	.....	.....	3	1	2	.....	.....	1	3	1	1	.....
Laryngitis.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bronchitis.....	.....	1	5	1	.....	3	.....	.....	1	1	.....	2	1	2	.....	.....
Pneumonia (all forms)	3	1	1	1	1	2	1	2	1	.....	.....	2	5	1	1	.....
Diarrhoea .....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Enteritis .....	.....	1	1	2	.....	2	1	.....	2	1	1	4	3	.....	3	.....
Gastritis .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Syphilis .....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rickets .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Suffocation, overlying .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Injury at birth .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Atelectasis	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Congenital malformations.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	6	2	1	1	.....
Premature birth	2	3	1	4	2	2	6	2	5	4	2	7	7	3	2	.....
Atrophy, debility & marasmus .....	.....	1	.....	1	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Other causes .....	.....	.....	.....	1	.....	1	.....	.....	1	.....	1	1	1	1	.....	.....
Total deaths under one year	7	7	10	13	3	11	12	5	13	6	7	25	25	10	9	1
Number of Births*	58	103	80	105	41	122	134	76	166	131	155	189	219	131	157	19
Infant Mortality Rate*	121	68	125	124	73	90	89	66	78	46	45	132	114	76	57	
Total Deaths at all ages†	44	67	62	103	38	78	104	90	97	112	108	131	142	134	146	14

* The births dealt with in this table are (a) 1,595 live births notified under the Notification of Births Acts, and (b) 317 registered and not previously notified ; including 45 births in Harton Hospital and other maternity homes among "non-residents" of the Borough. Elsewhere in this report the Registrar-General's figures of births registered during the calendar year have been used for the calculation of birth-rates.

† Includes 11 deaths in Hospitals among persons with no fixed abode.

NOTE:—The decrease in the births and deaths in Shields Ward and Holborn Ward since 1932 is mainly due to the transference of the population from those Wards to Tyne Dock, Simonside, West Park and Harton Wards in connection with housing clearance schemes.

TABLE 12.—SUMMARY OF METEOROLOGICAL OBSERVATIONS, 1936, taken at 9 a.m. daily at the Bents Park and Health Department, South Shields.

MONTH.	AIR TEMPERATURE.				HYGROMETER		EARTH TEMPERATURE.		RAINFALL (in inches).			WIND.													
	Average		Absolute.		Dry Bulb.	Wet Bulb.	Relative Humidity.	At 1 Foot Depth.	At 4 Feet Depth.	Total Fall.	No. of days rain fell .01" or more	Most in a day.		Direction at 9 a.m. Number of Days.											
			Minimum.	Maximum.																		Date.	Minimum.		
	Barometer (corrected for elevation, temperature, etc.)	Maximum.	Minimum.	Maximum.	Minimum.	Date.	Date.	N.	N.E.	E.	S.E.	S.W.	W.	N.W.	Calm.										
January	29.412	42.1	34.1	48.3	31	25.6	19	38.7	37.6	90	35.7	39.6	4.06	24	0.77	29	2	1	1	3	3	3	3	15	..
February	29.709	41.5	32.5	48.6	20	25.3	5	36.9	35.3	85	35.2	37.8	2.62	15	0.62	28	2	1	3	5	3	5	6	4	..
March	29.809	46.8	37.9	58.8	20	31.7	4	41.8	40.3	87	40.5	40.1	2.27	19	0.68	26	2	2	4	7	3	4	4	5	..
April	29.953	49.0	37.2	62.3	25	30.2	21	44.9	40.6	66	44.3	44.8	1.37	13	0.22	13	9	4	3	3	1	1	2	7	..
May	30.054	53.5	44.0	59.3	12	37.3	22	50.1	47.4	81	51.8	49.7	1.90	17	0.95	24	4	11	3	7	2	3	..	1	..
June	29.955	62.0	49.1	72.2	9 & 24	40.6	4	57.1	53.6	79	57.5	54.2	2.70	15	1.30	3	5	7	1	1	3	6	2	5	..
July	29.672	65.8	54.1	71.6	7	50.2	22	61.2	57.6	80	61.0	59.0	2.69	18	0.69	7	3	1	1	1	3	7	12	3	..
August	30.001	68.5	53.5	76.7	29	48.4	2 & 8	62.1	58.3	78	60.9	59.6	3.57	13	0.90	9	1	..	..	2	5	8	11	4	..
September	29.966	61.7	52.6	69.3	2	41.7	29	57.8	55.9	88	58.5	59.6	3.08	12	0.89	24	7	4	1	4	5	3	4	2	..
October	29.972	56.2	42.8	67.4	22	36.5	31	50.2	47.6	81	48.4	53.8	1.81	20	0.29	30	5	2	..	2	2	3	9	8	..
November	29.780	48.3	36.5	54.3	29	24.9	24	43.0	41.6	88	40.8	47.2	3.41	20	0.92	17	2	1	1	..	3	7	4	12	..
December	29.863	46.7	36.0	54.4	18	26.2	7	41.1	39.7	88	38.8	41.8	1.55	15	0.55	14	3	..	..	..	1	16	4	7	..
AVERAGES	29.846	53.5	42.5	..	..	..	..	48.7	46.3	82	47.8	48.9	..	..	..	..	..	..	..	..	..	..	..	..	..
TOTALS	..	..	..	..	..	..	..	..	..	..	..	..	31.03	201	..	..	45	34	18	35	34	66	61	73	..

